Independent Evaluation Design Document
New Hampshire 1115 Granite Advantage Demonstration

Prepared by

The University of Massachusetts Medical School

Commonwealth Medicine/Public and Private Health Solutions

for

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Department of Health and Human Services

and

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Evaluation Design Document

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Acronyms and Definitions

Acronyms	Full Terms
APCD	All payer claims data
BRFSS	Behavioral Risk Factor Surveillance System
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CE	Community engagement
CHIS	Comprehensive Health Care Information System
CMS	Centers for Medicare & Medicaid Services
DD	Difference-in-difference
DHHS	Department of Health and Human Services
ED	Emergency Department
EDD	Evaluation Design Document
ESI	Employer-sponsored insurance
EQRO	External Quality Review Organization
FPL	Federal Poverty Level
FQHC	Federally Qualified Health Center
GA	Granite Advantage
GAHCP	Granite Advantage Health Care Program
GWP	Granite Workforce pilot
HCRIS	Healthcare Cost Report Information System
HEDIS	Healthcare Effectiveness Data and Information Set
IE	Implementation effectiveness
ITS	Interrupted time series
ITT	Intent-to-treat effect
KII	Key informant interviews
MCM	Medicaid Care Management
MCOs	Managed Care Organizations
MMIS	Medicaid Management Information System
NH	New Hampshire
PAP	Premium Assistance Program
PE	Program effectiveness
PMPM	Per member per month
PSM	Propensity score matching
PSW	Propensity score weighting
QED	Quasi-Experimental Design
RCA	Rapid cycle assessment
SME	Subject matter expert
SNAP	Supplemental Nutrition Assistance Program
RE	Retroactive eligibility
STC	Special Terms and Conditions
TANF	Temporary Assistance for Needy Families
T&C	Treatment and Control
TOT	Treatment-on-the-treated
UMMS	University of Massachusetts Medical School

1. General Background

1.1 Demonstration Overview

"On January 11, 2018, the Centers for Medicare & Medicaid Services (CMS) published a letter to state Medicaid directors providing guidance to states interested in implementing incentives for work and community engagement for non-elderly, non-disabled, non-pregnant adult Medicaid beneficiaries. CMS signaled its support for state experimentation with policies that make Medicaid eligibility, coverage, enhanced benefits, and/or reduced premiums or cost sharing conditional on compliance with work or community engagement requirements. CMS also signaled its expectation that states will test the hypotheses that such policies lead to increased employment and community engagement rates and that increased employment will promote health and wellbeing." (CMS, 2019)[1]

In June 2018, the New Hampshire (NH) Governor signed Senate Bill (SB) 313, which created the Granite Advantage Health Care Program to cover NH's adult Medicaid expansion population of approximately 51,000 individuals between the ages of 19 – 64 up to 138% of the Federal Poverty Level (FPL)This program, which replaced the NH Health Protection Program (NHHPP) and the Premium Assistance Program (PAP), requires all current participants to enroll in the State's Medicaid Care Management (MCM) program beginning January 1, 2019. If a member did not choose an MCO during the November 2018 Open Enrollment period, they were automatically enrolled to receive benefits under one of the two existing NH Medicaid Managed Care Organizations (MCOs). All members had 90 days to choose a different health plan. As of September 1, 2019, NH will have a third MCO to serve Medicaid members. Medicaid members can choose to enroll in the new MCO or one of the current MCOs during the Open Enrollment period in August.

In accordance with SB 313, the NH Department of Health and Human Services (DHHS) submitted an application to CMS for a Section 1115(a) waiver to (a) apply work and community engagement (CE) requirements to the Medicaid expansion population as a condition of continuing eligibility; and (b) eliminate three months' retroactive eligibility (RE). The waiver demonstration that includes these two policies (CE and RE) was approved on November 30, 2018. On January 1, 2019, the NHHPP became Granite Advantage (GA).and the RE policy immediately became effective. On March 1, 2019, the CE policy became effective; however, members will not have to begin complying with the Community Engagement requirement until June 1st and the first date any member could potentially be suspended from Medicaid due to non-compliance with CE is August 1st. Since these effective dates, RE and CE policy have been implemented simultaneously.

[1] CMS. Evaluation Design Guidance for Section 1115 Eligibility and Coverage Demonstrations. https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/ce-evaluation-design-guidance.pdf. Last accessed 4/24/2019.

As part of the waiver approval process, CMS created Special Terms and Conditions (STC)[2] that stipulate the operation and service delivery of the demonstration. The STC requires an impact evaluation of the demonstration and sets out the basic requirements of the evaluation including questions, hypotheses, timeline, and reporting. In addition, CMS recently released updated guidance for Section 1115(a) eligibility and coverage demonstration evaluations.[3]

1.2 Evaluation Design Overview

This evaluation design document (EDD) addresses primary and subsidiary research questions and hypotheses in alignment with the STC and Section 1115 eligibility and coverage demonstration evaluation guidance. There are three components: CE, RE, and program sustainability and cost. The EDD also incorporates program goals and evaluation needs specific to New Hampshire's circumstances. **Table 1** briefly summarizes the key evaluation outcomes and outcomes. These are discussed in more detail in Sections 2 through 4.

Table 1: Key GA Evaluation Components, Outcomes, and Analysis Methods

Evaluation Components	Key parameters of implementation effectiveness outcomes	Key parameters of program effectiveness outcomes
1. CE	Understanding of and actual CE qualifying activities; barriers and support to comply with CE requirements; reporting CE activities; reason for Medicaid disenrollment; likelihood of re-enrolling in Medicaid	Employment; income; transition to commercial health insurance; health outcomes
2. RE	Awareness of new restrictions among uninsured; implementation steps and costs; appeals process; delay in implementation	Likelihood of enrollment and enrollment continuity; increase in enrolling healthy people; health outcome; adverse financial impacts on consumers
3. Sustainability/Cost	N/A	Administrative cost; total cost of care; uncompensated care
Key analytic methods	Univariate and bivariate descriptive statistics, difference-in-difference model, interrupted time series, regression analyses by subgroups	Qualitative data collection and thematic analyses

The CE policy evaluation, the first component of the GA evaluation, will use both qualitative and quantitative methods (mixed methods) to monitor implementation effectiveness (IE) and evaluate program effectiveness (PE) of the GA demonstration. The IE evaluation helps interpret the PE findings and inform recommendations for program enhancements. The IE evaluation will assess, at a minimum, successful (or

[2] New Hampshire Granite Advantage Health Care Program Special Terms & Conditions. https://www.dhhs.nh.gov/ombp/medicaid/documents/ga-stc-11292018.pdf. Last accessed 4/24/2019.
[3] CMS. Evaluation Design Guidance for Section 1115 Eligibility and Coverage Demonstration. https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/ce-evaluation-design-guidance.pdf. Last accessed 4/24/2019.

failing) program characteristics, program participation rate, reasons for CE noncompliance, coordination of strategies with other program such as the Supplemental Nutrition Assistance Program (SNAP)/Temporary Assistance for Needy Families (TANF), administrative cost, and the drivers of those costs associated with the program. The IE data sources include interviews with the program administrator and staff, interviews with Medicaid MCOs, focus groups and interviews with Medicaid members (both current and former), member surveys, and quantitative data such as program enrollment and CE monitoring metrics.

The PE evaluation focuses on members' short-term and long-term outcomes including labor force participation, financial well-being, and health-related outcomes. This EDD proposes a quasi-experimental design (QED) that includes a comparison group of adult Medicaid MCO members matched with GA program participants. The actual comparison groups differ slightly between the CE and RE policies due to each policy's respective target population; more details are included in Sections 2 and 3.

The primary analysis method will be difference-in-difference (DD), supplemented by interrupted time series (ITS). These methods will identify changes in outcomes (e.g., employment, health) driven by the GA program, by controlling for secular trends (e.g., trends that impact the entire state) as well as confounders (such as member participation in other programs). In the modeling, we will focus on capturing the "intent-to-treat effect" (ITT) [Gupta, 2011; McCoy, 2017] on those facing the CE requirements. This approach helps to eliminate selection bias. For certain questions, we will examine the "treatment on the treated" (TOT) [DHHS, 2017] on those who comply with the CE requirements.

The data sources for PE include state beneficiary survey data; Medicaid enrollment, eligibility, claims, and encounter data; data extracts from the New HEIGHTS system—an integrated eligibility review system that contains information such as member characteristics, employment and income status, and eligibility for other public assistance programs; all payer claims data (APCD); and additional documentation available online or from NH DHHS.

In addition, we will align quality measures by using existing data sources (e.g., CMS's Adult Core Set of Health Care Quality Measure, Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults), and the Healthcare Effectiveness Data and Information Set (HEDIS) measures. We will create new quality measures using administrative data (as needed) and select a core set of measures for this evaluation. As part of the PE evaluation, we will collect the following primary data: two rounds of virtual (or telephonic) member interviews; member surveys for current and former Medicaid members associated with the GA program; in-person focus groups with members in each of the two rounds; and interviews with program staff, MCO staff, and other key stakeholders.

The RE policy evaluation, the second component of the GA evaluation, will include the entire GA population as treatment group members and will use an in-state comparison group from Medicaid MCOs as well. The key research questions required by the CMS evaluation guidance are centered on the hypothesis that with members' better understanding of the RE waiver policy, the removal of the barriers

to benefit renewal, value placed on coverage, etc., the waiver policy will increase enrollment/enrollment continuity, increase enrollment among people who are healthy, and ultimately improve members' health outcomes. The RE evaluation will use mixed data collection and analyses methods, similar to those to be used for the CE evaluation.

The third component of the evaluation is the cost impact of the GA program—including both CE and RE—and how it influences the financial sustainability of the Medicaid program. Three types of cost measures will be used: administrative cost, health services expenditure, and uncompensated care. The data will come primarily from administrative data and the interviews with program staff, Medicaid claims/ encounters, and health cost reports. Descriptive statistics and multivariate regressions in the DD or ITS framework will be conducted.

1.3 Outline of the EDD

Section 2 includes a detailed evaluation design for the CE waiver. Section 3 presents the design for evaluating the RE waiver. Section 4 includes a design for evaluating the sustainability and cost impacts of the GA program. Each section discusses the general background of each waiver policy, research questions and hypotheses, methods (including data sources, selection of target and comparison groups, measures, etc.), and methodological limitations. **Attachments A.1 through A.3** discuss the selection of the independent evaluator, the evaluation budget, and the evaluation timeline, respectively.

2. Evaluation Design for the Community Engagement Demonstration

2.1 General Background Information

On March 1, 2019, New Hampshire implemented the CE requirement (approved November 30, 2018) as a condition of continued Medicaid eligibility for Medicaid expansion (with some exemptions) and will begin enforcement of the requirement statewide on June 1, 2019. The demonstration will run through December 30, 2023, and impact adult Medicaid beneficiaries that are not exempted (as described below). New Hampshire's goals for the CE policy align with the goals of the Medicaid program, which are intended to:

- *Improve beneficiaries' health and wellness*. Promoting improved health and wellness ultimately helps to keep health care costs at more sustainable levels.
- *Increase beneficiaries' financial independence*. To the extent that the CE requirements help individuals achieve financial independence and transition to commercial coverage, the demonstration may reduce dependency on public assistance while still promoting Medicaid's purpose of helping states furnish medical assistance. Allowing New Hampshire to stretch its limited Medicaid resources will help to ensure the long-term fiscal sustainability of the program and preserve the health care safety net for those New Hampshire residents who need it most.

Initial Medicaid eligibility is not contingent upon meeting the CE requirement or confirming exemption status. Members enrolled in the GA who are subject to CE requirements are expected to obtain sustained part- or full-time employment and gain access to employer-sponsored or individual market coverage. The CE requirement aims to improve labor force and health outcomes and enhance economic independence among Medicaid members. The CE program's features and implementation plan are discussed below.

Member CE Requirements and Qualifying Activities

Members who are subject to CE requirements will be required to report their qualifying CE activities, at least 100 hours, on a monthly basis. Qualifying activities include:

- Subsidized or unsubsidized employment including self-employment[4]
- Vocational education or training and job skills training
- Education (accredited communuity college, college, or university; education directly related to employment; secondary school or course of study or high school equivalency diploma)
- Job search activities and job readiness assistance
- Volunteer community and public service activities
- Serving as a caregiver for non-dependent relative or other person with a

[4] If a member is already employed prior to becoming a GA member, that employment counts as a qualifying activity.

disabling health, mental health, or developmental condition
- Substance use disorder treatment
- Employment activities subject to another work requirement (e.g., SNAP or TANF)

Members Exempt from CE Requirements

NH DHHS exempts certain members from CE requirements.[5] According to an NH analysis, among 49,000 GA members in April 2019, about 14,000 (~30%) are exempted from CE requirements. These members are:

- Disabled
- Currently pregnant or within 60 days of the end of a pregnancy
- Parent or caregiver caring for a child under 6 years of age
- Parent or caregiver or a dependent with developmental disabilities
- Exempt from another work requirement (e.g., currently in TANF or SNAP)
- Enrolled in employer-sponsored insurance (i.e., Health Insurance Premium Payment Program)
- Medically frail (certified by licensed medical professional)
- Experiencing a temporary Illness or hospitalization
- Enrolled in a state-certified Drug Court Program.

Suspension of Coverage

CE hours not fully met in two consecutive months will lead to a suspension of Medicaid coverage for the member. While in suspension, the member will not receive Medicaid benefits; however, the member is not terminated from the Medicaid program.

Good Cause for Not Meeting CE Requirements

Eligibility will not be suspended in certain situations if the member can show good cause for missing the 100 hour CE activities in a given month. Examples of good causes are a family emergency or other life changing event, the birth or death of a family member, and inclement weather.

Curing Noncompliance with CE Requirements

The NH CE waiver also allows GA members to "cure" noncompliance, to prevent suspension of coverage. Members who do not have good cause for meeting the requirements can make up missed hours to prevent having their coverage suspended. Members who have been suspended can also make up missed hours to cure their noncompliant months and have coverage reinstated.

Termination of Coverage

Terminations happen only at an annual redetermination when a member is in suspended status on the redetermination date. Suspension status means that the member has not cured their non-compliance by either making up the missing hours, submitting an exemption, requesting good cause, or a combination of these. Once a

[5] Granite Advantage Health Care Program website. https://nheasy.nh.gov/#/granite-advantage/participation/exemptions. Last accessed April 30, 2019.

member is terminated, there are no restrictions on the member reapplying and being determined eligible for Medicaid.

GA members will have at least 75 calendar days after their date of eligibility before they must begin to meet the CE requirements. Therefore, for those members enrolled as of the start date of March 1, 2019, the first day of compliance enforcement is June 1, 2019, with the reporting of hours or the submission of an exemption request/good cause reason due by July 7, 2019. Furthermore, a member must be out of compliance for two consecutive months prior to a suspension; therefore, the first date a member could be suspended from coverage is August 1, 2019.

New Hampshire developed a Granite Workforce pilot (GWP) program[6] to help eligible GA members meet the CE requirement by entering employment or participating in educational and/or training activites.To be eligible for GWP, a member must be either (1) a parent or caretaker aged 19–64 responsible for a child under the age of 18, or (2) a childless adult aged 19–24. This program is scheduled to end in June, 2019; however, plans are being developed to continue this program.

2.2 Evaluation Hypotheses and Research Questions

The evaluation of CE requirements will include both implementation effectiveness (IE) and program effectiveness (PE). IE focuses on whether the program is implemented as intended. The IE evaluation affords valuable information to define program implementation characteristics, help interpret the PE findings, and inform recommendations for program enhancements. In contrast, the PE captures program outcomes and ultimately determines if CE requirements lead to positive impacts for GA members and the state's Medicaid program.

Hypotheses and Research Questions for the IE Evaluation. The IE evaluation provides contextual information and monitoring metrics about the demonstration implementation and assesses the fidelity of the implementation plan. A demonstration program that deviates from the original implementation plan creates opportunities for misleadingly attributing program outcomes to the originally approved demonstration policy and thus generates potentially fallacious conclusions. In addition, the IE explores the experiences of program staff and participants (i.e., GA members who are subject to CE requirements) and offers information on the barriers to and facilitators of program implementation and participation and program impact. **Table 2** presents the hypotheses, research questions, measures, data sources, and analysis strategies for each IE evaluation question.

[6] The GWP program is scheduled to end in June 2019. However, New Hampshire is using the rule-making process to extend the program, to provide continuing support for GA members.

Table 2. Measures, Data sources, and Analytic Approaches for the CE Implementation Evaluation

Outcome measure	Data sources	Analytic approach
Primary research question 5*: What is the **distribution of activities** beneficiaries engage in to meet CE requirements?		
Number and proportion of beneficiaries reporting each qualifying activity	New HEIGHTS data; CE monitoring metrics**	Descriptive quantitative analysis of qualifying activities
Subsidiary research question 5a: How do **qualifying activity patterns** change over time?		
Number and proportion of beneficiaries reporting each qualifying activity	New HEIGHTS data; CE monitoring metrics**	Descriptive quantitative analysis of quarterly trends in qualifying activities
Primary research question 6: What are **common barriers (or reasons to fail) to compliance** with CE requirements?		
Barriers to compliance among eligible beneficiaries	Member interview; Member focus group; Interview with state Medicaid program administrator/staff/subject matter expert (SME)	Descriptive qualitative analysis of barriers to compliance with CE requirements
Number and proportion of beneficiaries reporting barriers to compliance	State follow-up beneficiary survey	Descriptive quantitative analysis of barriers to compliance with CE requirements
Primary research question 7: Do beneficiaries subject to CE requirements report that they **received supports needed** to participate, such as job placement assistance or childcare resources?		
Number and proportion of beneficiaries reporting receipt of supports that are provided or arranged by Medicaid agency or included in referrals to non-Medicaid agencies or resources	State follow-up beneficiary survey	Descriptive quantitative analysis of supports received to support compliance with CE requirements
Primary research question 8: Do beneficiaries subject to CE requirements **understand the requirements**, including how to satisfy them and the consequences of noncompliance?		
Beneficiary understanding of various CE requirements (including how to satisfy the requirements and consequences of noncompliance)	Member interview; Member focus group	Descriptive qualitative analysis of beneficiary knowledge of CE requirements
Scaled measures of enrollee knowledge of CE requirements and consequences of noncompliance	Member interview; State follow-up beneficiary survey	Descriptive quantitative analysis of beneficiary knowledge of CE requirements
Primary research question 9: How many beneficiaries are required to **actively report their status**, including exemptions, good cause circumstance, and qualifying activities?		
Quarterly number and proportion required to actively report exemptions Quarterly number and proportion required to actively report good cause circumstances Quarterly number and proportion required to actively report qualifying activities	New HEIGHTS data	Descriptive quantitative analysis of beneficiary reporting obligations
Subsidiary research question 9a: What strategies has the state pursued to **reduce beneficiary reporting burden**, such as matching to state databases?		

Outcome measure	Data sources	Analytic approach
State strategies for reducing reporting burden	Interview with state Medicaid program administrator/staff/SME	Descriptive qualitative analysis of planned and implemented reporting methods, including passive reporting through data matching
Subsidiary research question 9b: How commonly do beneficiaries **claim good cause circumstances** that waive CE requirements and/or reporting?		
Quarterly number of good cause circumstances from CE requirements Quarterly number of good cause circumstances from CE reporting	New HEIGHTS data; CE monitoring metrics**	Descriptive quantitative analysis of requests for good cause exemptions
Primary research question 10: What is the distribution of **reasons for disenrollment** among demonstration beneficiaries?		
Number and proportion of beneficiaries disenrolled for noncompliance, for being over-income, and for transitions to marketplace plans, and other reasons	New HEIGHTS data; CE monitoring metrics;** MMIS/Medicaid eligibility and enrollment data	Descriptive quantitative analysis of disenrollments by length of enrollment span and by new and previously enrolled beneficiaries
Primary research question 11: Are beneficiaries who are disenrolled for noncompliance with CE requirements **more or less likely to re-enroll** than beneficiaries who disenroll for other reasons?		
Probability of re-enrolling in Medicaid after a gap in coverage of at least 1 month (3 months)	New HEIGHTS data; CE monitoring metrics**; MMIS/Medicaid eligibility and enrollment data	Comparison of regression-adjusted probability of re- enrollment among beneficiaries initially subject to the CE requirement who were: 1) disenrolled for noncompliance 2) disenrolled for reasons other than noncompliance
Primary research question 12: What are successful **strategies** that states have used to effectively **coordinate with SNAP/TANF**?		
Strategies state used to effectively coordinate with SNAP/TANF	Interview with state program administrator/staff/SME	Descriptive qualitative analysis
Subsidiary question 12a: How does program participation influence **participation in SNAP/TANF**?		
Change in participation in SNAP/TANF program	New HEIGHTS data; Interview with state program administrator/staff/SME	Descriptive quantitative and qualitative analysis
Primary research question 13: What are **unintended or adverse consequences** of CE policy?		
Unintended consequences	Interview with state program administrator/staff/SME; Member interview; Member focus group	Descriptive qualitative analysis

Note: * Measure numbers do not start from 0; this was done purposefully to ease the cross-check between measures in the EDD and CMS evaluation guidance.
**CMS has not yet provided technical specifications of these monitoring measures. For information that is based on these monitoring measures, NH may provide further clarity.

PE Evaluation Logic model. The overall PE evaluation of the NH CE waiver policy will be guided by a logic model as demonstrated in Figure 1. The logic model links the CE policy with short-term, intermediate, and long-term outcomes. As illustrated in the logic model, the CE waiver policy, if successful, is expected to result in better employment outcomes (e.g., higher likelihood of employment, increased or sustained employment), followed by improved financial well-being (e.g., increased income and uptake of commercial coverage), and, ultimately, enhances members' health outcomes and member experience.

The impact of the CE policy on GA member outcomes is subject to (a) moderating factors that influence the strength of the relationship between CE policy and outcomes; and (b) confounding/contextual variables (e.g., regional and local economy, residents' openness to change from welfare to work) that may bias the estimate of program impact. The moderating and contextual variables will be controlled for in regression models.

PE Hypotheses and Research Questions. Closely aligned with the logic model, the evaluation includes hypotheses, primary research questions, and derived subsidiary questions. These hypotheses and questions are consistent with CMS's expectations for testing CE requirements; in addition, they expand on those in the CMS guidance for CE evaluation to address NH's specific goals and are grounded in NH's demonstration design and data infrastructure.

The key hypotheses of the PE include the following:

Hypothesis 1: Medicaid beneficiaries subject to CE requirements will have higher employment levels, including work in subsidized, unsubsidized, or self-employed settings, than Medicaid beneficiaries not subject to the requirements.

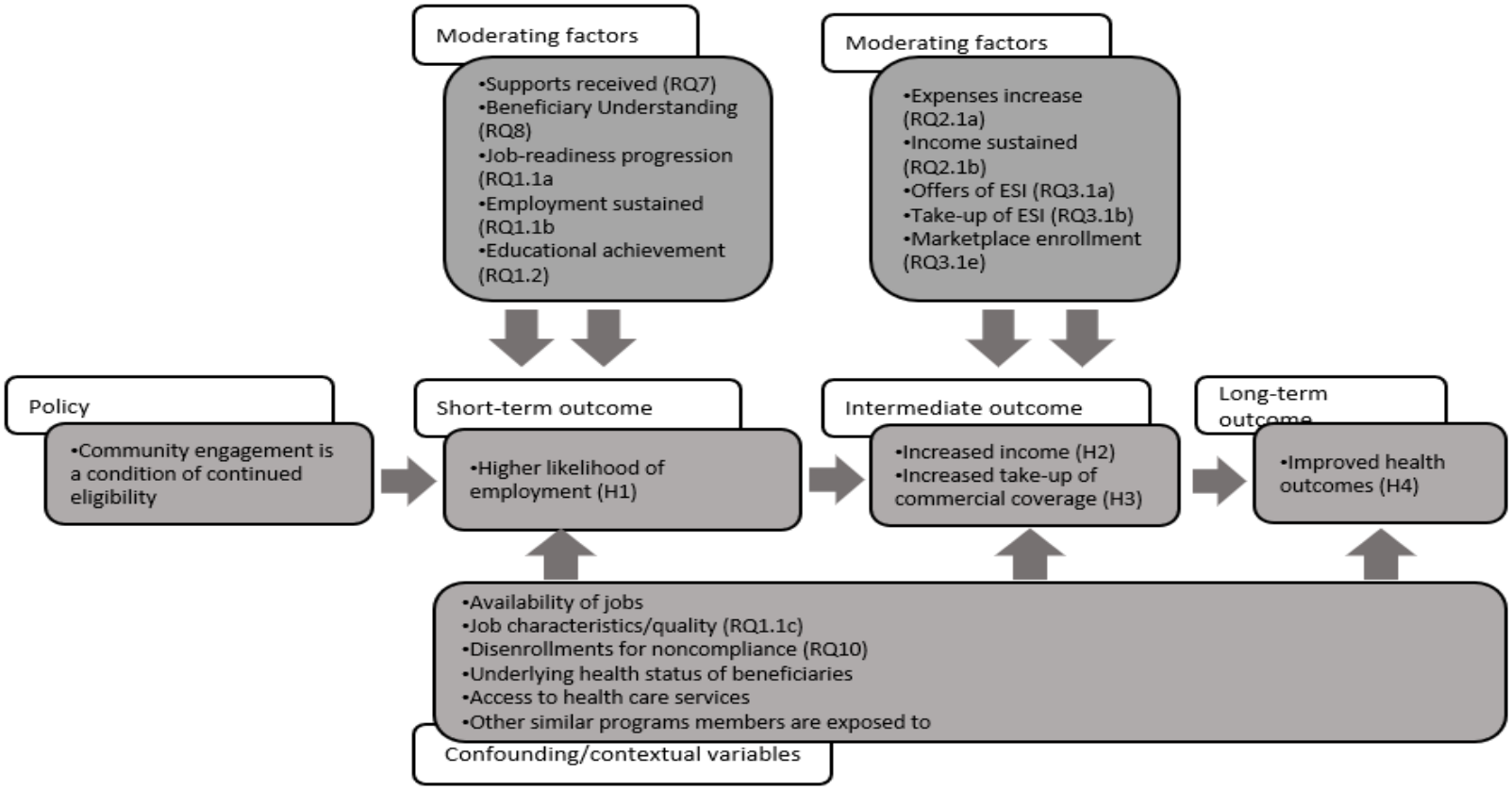
Hypothesis 2: CE requirements will increase the average income of Medicaid beneficiaries subject to the requirements, compared to Medicaid beneficiaries not subject to the requirements.

Hypothesis 3: CE requirements will increase the likelihood that Medicaid beneficiaries will transition to commercial health insurance after separating from Medicaid, compared to Medicaid beneficiaries not subject to the requirements.

Hypothesis 4: CE requirements will improve the health outcomes of current and former Medicaid beneficiaries subject to the requirements, compared to Medicaid beneficiaries not subject to the requirements.

Table 3 provides a snapshot of the PE evaluation hypotheses, primary research questions, and subsidiary questions; comparison strategies; outcome measures; data sources; and analytic approaches. The data sources and analytic approaches discussed in greater detail in Section 2.3. **Attachment A.5** includes a detailed measure table for all outcome measures included in **Table 3**.

Figure 1. Logic Model for the NH 1115 CE Demonstration Evaluation



Note: This model is quoted from CMS CE evaluation guidance.

Table 3. Comparison Strategies, Measures, Data sources, and Analytic Approaches for CE Evaluation

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
Hypothesis 1: *Medicaid adult beneficiaries subject to CE requirements will have* ***higher employment levels****, including work in subsidized, unsubsidized, or self-employed settings, than Medicaid adult beneficiaries not subject to the requirements.*				
Primary research question 1.1: Are beneficiaries subject to CE requirements more likely than other similar Medicaid beneficiaries not subject to these requirements to **be employed (including new and sustained employment)**?				
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE*	Probability of being employed among beneficiaries Probability of being employed at least 20 hours per week* *† Average Number of hours worked per week	Entire treatment and control group (T&C) populations who meet survey selection requirements	New HEIGHTS data†; state baseline beneficiary survey; state follow-up beneficiary survey	Difference-in-difference (DD) Model
Subsidiary research question 1.1a: Do beneficiaries who initially participate in CE qualifying activities other than employment **gain employment within some defined time** (i.e., is there evidence of job-readiness progression?)				
n.a.	Proportion employed at 6 months, within 1 year, and within 2 years, respectively Proportion employed at least 20 hours per week at 6 months (1 year, 2 years)	Beneficiaries who initially participate in CE qualifying activities other than employment and those who meet survey selection requirements	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey	Descriptive analysis of employment status at 6 months, 1 year, and 2 years among those who initially meet non-employment CE qualifying activities
n.a.	Proportion of beneficiaries meeting CE requirement by activity (employment, education, volunteer work, etc.)	Beneficiaries who initially participate in CE qualifying activities other than employment and those who meet survey selection requirements	CE monitoring metrics	Descriptive analysis of quarterly changes in CE qualifying activities
Subsidiary research question 1.1b: Is employment among individuals subject to CE requirements **sustained** over time, for example for a year or more, including after separating from Medicaid?				
n.a.	Proportion of beneficiaries employed for one year or more, continuously, since enrollment	Entire T population who meets survey selection requirements	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey	Descriptive analysis of sustained employment.

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
n.a.	Probability of being employed at least 20 hours per week Probability of an employment spell lasting 3 months (6 months, 1 year) since enrollment (or implementation of CE requirements) Average length of continuous employment since enrollment (or implementation of CE requirements)	Entire T population who meets survey selection requirements	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey	Comparison of regression-adjusted means in employment 1 or 2 years post-enrollment among: 1) those already employed at enrollment (or at implementation of requirements); 2) those who gained employment in the first 6 months of enrollment; 3) those who did not gain employment in the first 6 months of enrollment
Subsidiary research question 1.1 c: What are the **characteristics of new jobs** gained by CE participants compared to jobs already held (and sustained) by people subject to CE requirements?				
Beneficiaries already employed at enrollment (or at implementation of CE requirements)	Hourly wages, average number of hours worked per week, industry and availability of employer-sponsored insurance	Members of T who already held job at time of GA program enrollment who meet survey selection requirements	New HEIGHTS data; State baseline beneficiary survey; State follow-up beneficiary survey	Descriptive analysis of characteristics of new jobs gained among beneficiaries subject to CE requirements (newly gained vs. previous jobs among beneficiaries already employed at enrollment}
Primary research question 1.2: Is being subject to CE requirements associated with **changes in education outcomes** (either positive or negative), such as achievement of diplomas and certifications?				
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE	Highest grade attained‡	Entire T&C populations who meet survey selection requirements	New HEIGHTS data; state beneficiary survey	DD model
Hypothesis 2: *Community engagement requirements will increase* ***the average income*** *of Medicaid beneficiaries subject to the requirements, compared to Medicaid beneficiaries not subject to the requirements*				
Primary research question 2.1: Do CE requirements increase **income**?				
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE	Income (wage and other income)	Entire T&C populations who meet survey selection requirements	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey	DD model
Subsidiary research question 2.1a: Do CE requirements affect expenses, such as **childcare and transportation costs**, or change income due to loss of eligibility for public programs like SNAP or TANF?				
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further	Childcare costs Transportation costs	Entire T&C populations who meet survey	New HEIGHTS data; state baseline beneficiary survey;	DD model

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
matched with GA beneficiaries subject to CE	Changes to income from loss of key public program eligibility (i.e., SNAP, child care assistance, cash benefit)	selection requirements	state follow-up beneficiary survey	
Subsidiary research question 2.1b: Are changes in **income sustained** over time, for example for a year or more, including after separating from Medicaid?				
n.a.	Proportion of beneficiaries who report higher or lower income, of 5%, 10%, and 20% or more in at least 50 (75) percent of months since enrollment (or implementation of CE requirements)	Entire T population who meets survey selection requirements	New HEIGHTS data; state follow-up beneficiary survey	Descriptive analysis of sustained income changes, 1 and 2 years post enrollment
n.a.	Probability of earning above 100 percent FPL Probability of earning above 100 percent FPL in at least 50 (75,100) percent of months since enrollment (or implementation of CE requirements) Average monthly income since enrollment (or implementation of CE requirements)	Entire T population who meets survey selection requirements; subgroup of beneficiaries based on their earnings at enrollment	New HEIGHTS data; state follow-up beneficiary survey	Comparison of regression-adjusted means of outcomes 1- and 2-years post enrollment among: 1) those earning below 100 percent FPL at enrollment 2) those earning above 100 percent FPL at enrollment
Subsidiary research question 2.1c: To what extent do income increases resulting from participation in CE increase the number of beneficiaries **transitioning off Medicaid** because they are no longer income eligible for Medicaid?				
n.a.	Probability of being disenrolled for being over-income	Entire T population who meets survey selection requirements	NEW HEIGHTS data; state follow-up beneficiary survey	Comparison of regression-adjusted quarterly enrollment rates for being over-income, among: 1) Beneficiaries meeting CE requirement through employment 2) Beneficiaries meeting CE requirement through activity other than employment (If small cell size issue is experienced with these subgroups,

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
				these two categories will be collapsed.)
Subsidiary research question 2.1d: To what extent do income increases resulting from participation in CE increase the number of beneficiaries **transitioning off other public support programs like TANF and SNAP**?				
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE	Probability of being enrolled in SNAP** within 1 year (and 2 years) of enrollment	Entire T&C populations who meet survey selection requirements	New HEIGHTS data; state follow-up beneficiary survey	DD model
n.a.	Probability of being enrolled in SNAP within 1 year (and 2 years) of enrollment	Entire T population who meets survey selection requirements	New HEIGHTS data; state follow-up beneficiary survey	Comparison of regression-adjusted quarterly enrollment in SNAP 1- and 2-years post-enrollment among: 1) Beneficiaries meeting CE requirement through employment 2) Beneficiaries meeting CE requirement through employment and who experience income gains 3) Beneficiaries meeting CE requirement through activity other than employment (If small cell size issue is experienced with these subgroups, these two categories will be collapsed.)
Hypothesis 3: CE requirements will increase the likelihood that Medicaid beneficiaries **transition to commercial health insurance** after separating from Medicaid, compared to Medicaid beneficiaries not subject to the requirements.				
Primary research question 3.1: Do CE requirements lead to increased **take-up of commercial insurance**, including employer-sponsored insurance (ESI) and Marketplace plans?				
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE	Reported enrollment in commercial coverage, including ESI††,within 1 year (2 years) of disenrollment from Medicaid	Entire T&C populations who meet survey selection requirements	State baseline beneficiary survey; State follow-up beneficiary survey; New HEIGHTS data	Regression model of enrollment in commercial coverage
Subsidiary research question 3.1a: Are those subject to CE requirements more likely to **obtain employment with offers of ESI**				

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE	Reported offer of ESI (including whether the firm offers ESI and whether the individual is eligible for ESI) within 1 year (2 years) of disenrollment from Medicaid	Entire T&C populations who meet survey selection requirements	State baseline beneficiary survey; State follow-up beneficiary survey; New HEIGHTS data	DD Model
Subsidiary research question 3.1b: What are **take-up rates for ESI** among those who are offered and eligible for ESI?				
n.a.	Proportion of those with offer of ESI who enroll in ESI	Entire T population who is offered and eligible for ESI and meets survey selection requirements	State baseline beneficiary survey; State follow-up beneficiary survey; New HEIGHTS data	Descriptive analysis of ESI take-up among those offered and eligible for ESI
Subsidiary research question 3.1c: Is new **ESI coverage sustained** over time, such as one year or more?				
n.a.	Proportion who still have ESI coverage, 1 year (2 years) after initial post-CE ESI take-up Proportion with Medicaid coverage, 1 year (2 years) after initial post-CE ESI take-up Proportion uninsured, 1 year (2 years) after initial post-CE ESI take-up	Entire T population who meets survey selection requirements and obtains ESI	State follow-up beneficiary survey; New HEIGHTS data; MMIS/Medicaid enrollment and eligibility	Descriptive analysis of coverage at 1 and 2 years after initial ESI take-up
Subsidiary research question 3.1d: Are beneficiaries with ESI able to **pay premiums and meet other cost-sharing responsibilities**, such as deductibles and copayments?				
n.a.	Reported out-of-pocket medical spending in the last year Reported problems paying medical bills*****	Entire T population who meets survey selection requirements and obtains ESI	State baseline beneficiary survey; State follow-up beneficiary survey; New HEIGHTS data	Descriptive analysis of reported beneficiary out-of-pocket spending for former demonstration beneficiaries who transitioned to ESI
Subsidiary research question 3.1e: Are those subject to CE requirements more likely to **enroll in qualified health plans** offered in the Marketplace?				
n.a. CE	Reported enrollment in Marketplace plans, within 1 year (or 2 years) of disenrollment from Medicaid	Entire T population who meets survey selection requirements	NH CHIS (APCD if available); state follow-up beneficiary survey; New HEIGHTS data	Regression model of Marketplace plan coverage among beneficiaries initially enrolled in demonstration and subject to CE requirements

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
Primary research question 3.2: Are CE requirement associated with **coverage losses** (if beneficiaries transition off Medicaid and do not enroll in commercial health insurance)?				
n.a. CE	Any health insurance coverage, within 1 year (or 2 years) of disenrollment from Medicaid[††]	Entire T population who meets survey selection requirements	NH CHIS (APCD if available); state follow-up beneficiary survey; New HEIGHTS data	Regression model of any health insurance coverage among beneficiaries initially enrolled in demonstration and subject to CE requirements
Subsidiary research question 3.2a: If coverage losses are observed, what are the **barriers to enrollment** in new coverage cited by former beneficiaries?				
n.a.	Reported barriers to enrollment in new coverage	Entire T&C populations who meet survey selection requirements	Member interviews; Member focus groups; Interview with program administrator/staff/SMEs	Descriptive qualitative analysis
Hypothesis 4: *CE requirements will improve the* ***health outcomes of current and former*** *Medicaid beneficiaries subject to the requirements, compared to Medicaid beneficiaries not subject to the requirements.*				
Primary research question 4.1: Do CE requirements lead to improved health outcomes for beneficiaries subject to the requirement?				
Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE	Reported physical health status Reported mental health status Reported emergency department (ED) visit in past year Reported hospital admission in past year	Entire T&C populations who meet survey selection requirements	State baseline beneficiary survey; State follow-up survey	DD model
Subsidiary research question 4.1a: What are the **trajectories of beneficiary health status** over time, including after separation from Medicaid?				
n.a.	Change in reported physical health status Change in reported mental health status Change in reported ED visit in past year Change in reported	Entire T population who meets survey selection requirements	State baseline beneficiary survey; State follow-up survey	Descriptive analysis of self-reported health status and utilization over time

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
	hospital admission in past year			
Subsidiary research question 4.1b: Is **disenrollment for noncompliance** with CE requirements associated with differences in **health outcomes**?				
Beneficiaries initially subject to CE requirement who remain enrolled	Reported physical health status Reported mental health status Reported ED visit in past year Reported hospital admission in past year	Entire T population who meets survey selection requirements	New HEIGHTS data; state baseline beneficiary surveys; State follow-up beneficiary survey	Regression model of self-reported health status among beneficiaries initially subject to requirement who were disenrolled for noncompliance

Note: The target population is demonstration beneficiaries subject to CE requirements unless otherwise noted in the analytic approach. If the study sample size is too small for some outcome measures, these measures will be dropped in the evaluation. New HEIGHTS system provides data only when members are in state public programs; when members leave Medicaid, their information will not be available and will have to be supplemented by beneficiary survey data. For CE evaluation outcome measures, the data are from a combination of administrative and survey data. Due to the size of survey sample, the analysis sample can be very small due to measure specification according to actual data (e.g. proportion of beneficiaries who report higher or lower income, of 5%, 10%, and 20% or more in at least 50 (75) percent of months since enrollment). The measure details also result in burden on survey respondents and increase risk for accuracy of survey response. Therefore, based on data cleaning and analysis, the measure specifications may be slightly modified to account for actual data distribution in actual evaluation.

*In NH, more than 95 percent of Medicaid beneficiaries are in managed care. The evaluation is restricted to managed care beneficiaries.

*† NH is retaining the 20 hour reference in the outcome measure as CMS included in the previous guidance. NH assumes that this is a marker associated with an outcome and not reflective of a State's weekly hourly requirement, which is 25 hours in NH. NH will change the reference in this measure to 25 if requested by CMS.

† New HEIGHTS system provides data for members when they are in state public assistance programs. When these members leave Medicaid, their information will not be available and will have to be supplemented by state beneficiary survey data.

‡ The outcomes of "degrees/credentials attained" and "certifications attained" are not included in this evaluation because New HEIGHTS does not capture this information.

** According to state analysis, the number of T group members receiving TANF is less than 10 at the beginning of this demonstration, so this measure about TANF has been dropped.

†† The wording of the outcome measures has been slightly modified from CMS guidance, based on how NH's state baseline beneficiary survey has been conducted.

2.3 Methodology

The evaluation will use a quasi-experimental design (QED). The section will first discuss the selection of treatment (or "target" or T) and comparison (C) groups, followed by a discussion of data collection, analytic methods, and methodological limitations.

2.3.1 Evaluation Design Summary

The PE evaluation will use the QED. Whenever appropriate, the evaluation will include a target or treatment group and an in-state comparison group to determine CE policy outcome and impact. Pre- and post-demonstration data will be collected, whenever possible, to enable a difference-in-difference (DD) evaluation. The evaluation data will primarily include the New HEIGHTS data and beneficiary surveys conducted by New Hampshire, supplemented by other administrative data. The IE evaluation will use qualitative data derived from interviews and focus groups, CE monitoring metrics, and survey data to describe program implementation progress and effectiveness. The results from both the IT and PE evaluations will be integrated to provide a full picture of the CE policy impact.

2.3.2 Target and Comparison Populations

New Hampshire is a relatively small state in terms of Medicaid member rolls. About 50,000 Medicaid beneficiaries were enrolled in the NHHPP program, before the GA demonstration started. Because the feasibility of looking for and finding employment is smaller for some groups (e.g., people with disabilities or with small children) than others, NH has chosen not to use randomization to determine Medicaid members' status of meeting mandatory CE requirements; instead, the state has set up exemption criteria based on Medicaid members' individual medical condition(s) and family characteristics. The policy also is implemented statewide and targeted to all non-exempted populations. For these reasons, a randomized controlled trial is not a feasible approach for this evaluation.

In the absence of a randomly assigned control group, this evaluation will use a QED to determine program effectiveness. For QED, a clear definition of the treatment group is critical to relate program impact to the right target population. Moreover, it is important to identify an appropriate comparison group to establish whether any change in the outcomes of treatment group members can be attributed to the new incentive structure created by the CE requirements.

Treatment/Target Group (T): The T group will consist of GA program participants who initially enrolled in the GA program through two Medicaid MCOs as of March 1,

2019, and are subject to CE requirements starting on June 1, 2019.[7] The evaluation plans to also include new GA members in the new (third) MCO[8] as treatment group members as well.

GA T group members have multiple pathways related to their compliance status with CE requirements and other socioeconomic and medical status changes. These GA T members may be fully compliant, that is, members will find employment (or increased and/or sustained employment) and receive employer-sponsored insurance (ESI) or insurance purchased through the individual marketplace; some of these members may have to return to Medicaid or purchase marketplace insurance if they lose ESI. In addition, some members may be unable to or do not fully meet CE requirements and will have Medicaid eligibility suspended and later re-instated.[9] In contrast, other GA members may be continuously noncompliant with CE requirements and will thus be involuntarily disenrolled from Medicaid and lose coverage. However, these disenrolled members can still reapply to Medicaid and become GA members again. A flowchart that reflects these members' pathways through the Medicaid and GA eligibility systems is included in Appendix A.3.

Using an intent-to-treat (ITT) approach, the treatment group members are defined by whether they are subject to the CE requirement (the treatment), regardless of their ultimate pathway through the program. Instead of treating these re-enrolled members as new treatment group members, who would receive more intensive CE intervention than the original GA treatment group members, the evaluation will treat these re-enrolling members based on their original GA status. They do not, therefore, become new/additional T group members.

The evaluation will track members' outcomes *longitudinally*, characterizing the length of time members are subject to CE requirements and evaluating the *long-term* impact of the CE requirements on members' employment performance. In other words, the long-term effect analysis starts from *the first time* these individuals become GA treatment group members. This design will therefore capture the ITT estimate, which ignores noncompliance, protocol deviations, withdrawal, and anything that happens after treatment status assignment (Gupta, 2011; McCoy, 2017). This estimator is convenient to use but tends to generate a more conservative estimate.

One exclusion criterion of CE T members is those exempted from the CE requirements because they tend to have very different readiness-to-work and medical and social service needs. Including exempted CE members would mischaracterize the treatment group. Also, those who voluntarily choose CE

[7] New Medicaid members who meet the GA member income threshold and enroll in one of the two current Medicaid MCOs or a new MCO beginning September 2019 will be included as additional treatment group members.

[8] New Hampshire will include a new Medicaid MCO beginning September 2019. New Medicaid applicants can be auto-enrolled to this MCO upon eligibility determination.

[9] It is possible that some treatment group members will later become medically frail or CE exempted. The evaluation still considers them as treatment group members, so member outcomes will be tracked over a longer time span. However, an indicator of this circumstance can be established to enable some subgroup analyses.

activities even if they are exempted will be excluded from the T group; these members are likely more motivated than the average T group member to seek employment, independence, and consequently better socioeconomic and health well-being.

With these exclusions and restrictions, the treatment group is cleanly defined. These exclusions are expected to increase the internal validity of the evaluation.

Comparison Group: The implementation of CE requirements among eligible GA adult Medicaid members is statewide, which limits the possibility of using members in different parts of NH as a comparison group. So this evaluation will use an in-state comparison group, that is, a group drawn from NH non-disabled Medicaid adult members enrolled in an MCO but not enrolled in the GA demonstration. According to the NH enrollment data (April 2019),[10] there were approximately 12,000 low-income non-disabled adults enrolled in the two Medicaid MCOs. This population will become the pool of comparison group, until the new MCO starts.[11]

For the pool of comparison group candidates, matching methods will be applied to them at baseline to determine a final roster of comparison group members. In the matching process, a variety of current statistical methods will be considered depending on the actual data and profile of candidates. For example, possible methods are propensity score matching (PSM), propensity score weighting (PSW), use of inverse propensity treatment weights (IPTW), and Oaxaca-Blinder reweighting covariate-outcome matching (Stuart, 2010; Stuart, DuGoff, Abrams, Salkever, & Steinwachs, 2013; Austin, 2011). These methods account for differences in the probability of participating in the GA waiver demonstration program. In selecting a method, the evaluation will weigh the pros and cons of each. For instance, if the matching method leads to a significant reduction in sample size, a weighting method will be considered. In fact, the March 2019 data show that a majority of the parent caretakers in the comparison group pool are females. In this case, PSW rather than PSM would be a more relevant approach because the PSM will reduce sample size but PSW does not. Alternatively, the evaluation will consider matching by subgroups, for example, the evaluation will construct a treatment and a comparison group among single mothers with children above the age of 6 or by quintiles of the population. Sub-classifying matching allows the evaluator to increase the comparability of treatment and comparison group members and demonstrate the GA effects on more homogeneous populations.

Multi-level characteristics (individual, MCO affiliation, geography, and local macroeconomics level) will be used in propensity score methods to create a comparison group of candidates similar to GA treatment group members. Examples

[10] New Hampshire Medicaid Enrollment Demographic Trends and Geography. https://www.dhhs.nh.gov/ombp/medicaid/enrollment-data.htm. Last accessed April 15, 2019.

[11] In New Hampshire, managed care is the dominant insurance type in NH Medicaid; the vast majority of those non-disabled adults are in managed care with only a tiny fraction in Fee for Service (FFS) plans. Members in FFS vs. managed care tend to differ in their average characteristics, so the comparison group will not include non-MCO enrolled members.

of individual characteristics will include age, gender, race/ethnicity, number of chronic conditions, income at eligibility determination, family composition (e.g., number of dependent children, if the data are available), and Medicaid eligibility category. Location-matching characteristics will include residency location (urban or rural). Local macroeconomics characteristics will include county-level median household income, employment/population ratio, etc.

The evaluation design also considered an out-of-state comparison group based on national surveys, but this comparison group has its own limitations and so was not chosen. First, it is hard to find a state, or a number of states, that do not impose work requirements on the Medicaid population and have economic characteristics (e.g., median household income, per-capita health care expenditure), demographics (e.g., urbanization of the state), policies (e.g., penetration of Medicaid managed care), and social characteristics (e.g., residents' reaction to the notion of "welfare to work") that are comparable to those in New Hampshire. Second, there are not adequate details in national survey data (e.g., American Community Survey [ACS], Behavioral Risk Factor Surveillance System [BRFSS]) to identify a treatment group that closely resembles the GA members subject to CE in NH. Third, the NH population is also healthier than those in the majority of other states. According to the 2018 America's Health Rankings,[12], New Hampshire ranks sixth among all states and the District of Columbia. Within the New England region, states with similar health status rankings are Massachusetts, Connecticut, and Vermont. However, the proportions of Medicaid enrollees among the Massachusetts and Vermont populations are significantly higher than in NH,[13] and Connecticut does not have a managed care enrolled population.[14]

2.3.3 Evaluation Period

The CE demonstration will run from March 1, 2019, through December 31, 2023. The evaluation will collect and analyze both pre-demonstration and post-demonstration data. For the pre-demonstration period, NH can provide data extracts dating back to January 1, 2017. To understand long-term impact of the demonstration, the evaluation needs to collect post-demonstration data at least 1 year after the demonstration is cover. Therefore, the evaluation period will be between January 1, 2017, through December 31, 2025, when New HEIGHTS data are used for outcomes; when outcomes are solely based on survey data, the evaluation period will be July 1, 2018, through December 31, 2025.

[12] America's Health Rankings 2018 Annual Report. https://www.americashealthrankings.org/learn/reports/2018-annual-report/findings-state-rankings. Last accessed May 17, 2019

[13] This comparison is based on the calculation of CMS Medicaid enrollment data and the total population by state as reported by the Census Bureau.

[14] This is based on Kaiser Family Foundation's report in total Medicaid managed care enrollment by state, available here: https://www.kff.org/medicaid/state-indicator/total-medicaid-mc-enrollment/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D. Last accessed May 17, 2019.

2.3.4 Data Sources

2.3.4.1 Qualitative Data Collection

Document Review. The program documents characterize the intervention and reflect legislative and regulatory updates of policy development, which are directly relevant for the evaluation. Evidence of the implementation challenges and known effects of CE-equivalent work requirements experienced by other public welfare programs will illuminate the development of the IE data collection instruments (e.g., survey and key informant interviews); they also offer supplemental evidence enhance the evaluation hypotheses. The evaluation team will search for these documents and literature on a regular basis and ensure that the most current evidence is incorporated in the evaluation.

Key Informant Interviews and Focus Groups. Key informant interviews (KIIs) and focus groups with members, program staff/administrators/subject matter expert(s), and MCOs will help answer questions about whether the program is being implemented as intended (IE evaluation approach). This has been identified by CMS as one of the key goals of a demonstration evaluation (see Attachment A of the STC). Also, the KII data provide contextual information for the PE evaluation. A summary of the qualitative data collection efforts and timing is included in **Table 4**.

Table 4: Key Informant Interview and Focus Group Data Collection

Data collection method	Type of respondent	Timeframe			
		1/1/21-6/30/21	7/1/21-6/30/22	1/1/23-6/30/23	7/1/23-6/30/24
Key Informant Interview	GA program participants (Current and former Medicaid members)	Up to 40*	N/A	Up to 40	N/A
	NH DHHS program administrators/staff/ Subject matter expert(s)	Up to 8	N/A	Up to 8	N/A
	NH Medicaid MCO staff	Up to 2	N/A	Up to 2	N/A
Focus Group	GA program participants	N/A	Up to 4	N/A	Up to 4

* New Hampshire plans to conduct an abbreviated interview with members about their understanding of the CE program requirements as the program is being launched.

Key Informant Interviews: The evaluation team will interview GA group members and program administrators/staff, MCO staff, and other subject matter experts (SMEs) as needed. For interviews with program administrators/staff or SMEs, the questions will focus on the priority of program goals; program administrative cost; pathways through which the GA program impacts member outcomes, program contexts and other programs that may influence program outcomes; system capability to quickly process changes in participants' status such as exemptions, modifications, and reactivations of Medicaid eligibility; anticipated and observed successes and challenges of the program operation and outcomes; and program resources and cost. We will conduct two rounds of interviews in 2021 and 2023 to learn of any changes in interviewees' opinions.

Interviews with MCOs will center on their capacity to address the access and care needs of new GA members, implementation successes and potential barriers to

supporting members' needs in coverage transition and anticipated and unanticipated program outputs and impact. Up to two interviews over two rounds will be conducted, for a total of up to four interviews.

Interviews with GA program participants/Medicaid members will include four target groups in order to gain a complete picture of member experiences: 1) members who are exempted from CE requirements; 2) members who meet CE requirements by obtaining employment that results in a change in insurance; 3) members who meet CE requirements but without a change in insurance; and 4) members who lose Medicaid coverage due to noncompliance with CE requirements. The interviews will thus include both current and former members. By including the latter, the evaluation can track members' longer-term perception of and experiences with the CE policy.

Each target group will further be divided by geographic setting (i.e., urban and rural), yielding a total of 8 target groups from which the evaluation will draw a random sample for the semi-structured interviews. The reason for stratifying the sample by setting is that CE opportunities and transportation options for members may differ significantly between geographic regions. Up to 5 members per target group will be randomly selected for the KIIs, yielding a total of up to 40 interviews per round. The actual number of KIIs will depend on whether and when the data collection reaches the saturation point when no further data collection is necessary. We will recruit interview members using administrative data (Medicaid claims and/or integrated eligibility review data/New HEIGHTS) that have member phone numbers, mailing addresses, and email addresses. Additionally, we will collaborate with NH DHHS' district offices to recruit members by public posting, community health center advertisements, etc. A stipend will be provided to interviewee participants to encourage participation.

There will be a total of two rounds of member KIIs using repeated cross-sectional samples (i.e., some members will be followed and present in each round, if they are not lost to follow-up; and other members will be interviewed only for one round to increase sample size). The second round of interviews will occur two years later, so that the evaluation can examine how the maturity of the GA program has impacted members' experiences and outcomes over time.

KIIs with program participants will cover a wide range of topics: understanding of the CE policy and its reporting requirements and exemptions; ease of reporting; availability of practical options for CE in their area; usefulness of the assistance from CE in seeking employment; availability of jobs; number and type of jobs applied to; take-home pay for those employed; experience with reasonable modifications; ease of accessing exemptions; ease of filing for good cause; barriers in complying with CE requirements; consequences in care gaps if suspended or disenrolled from Medicaid; reasons for not meeting the 100-hour requirement; and ideas on how the CE program could be improved.

Focus Groups: The evaluation team will conduct up to 4 focus groups of current and former GA members over two rounds (8 in total), about any challenges and concerns raised by in the KIIs and the state beneficiary surveys. These diversified focus

groups will concentrate on what the program can do better to help them in achieving better employment and health outcomes. Additional topics will be informed by themes and findings from the interviews and surveys and will explore facilitators and barriers to achieving better program outcomes. Each focus group will include up to 8 members. The purpose is not to duplicate information collected from interviews, but to add new program insights. The evaluation team will conduct the focus groups at a time and location convenient for the focus group participants (e.g., regional office, job centers). Incentives of a gift card or cash will be provided to participating focus group members.

2.3.4.2 Secondary Quantitative Data Collection

The PE evaluation requires a set of process and outcome measures as described in the logic model. These measures will be grouped into three areas: (1) outcome measures (dependent variables for regressions), (2) quality measures of services and care offered by the Medicaid and GA program (independent variables), and (3) other individual and regional characteristics (independent variables). The outcome measures, including employment, financial well-being, and health outcomes, are captured in the design tables shown in Section 2.2. The data for these measures come from multiple sources, as described below.

New HEIGHTS. New HEIGHTS is one of the largest and most complex computer systems that automates benefit review, benefit issuance, client scheduling, reporting, and a driver flow for eligibility for 32 programs in New Hampshire. Relevant New HEIGHTS data include GA member flag, member demographic characteristics (e.g., gender, race, education, language, income compared to the federal poverty level), and socioeconomic characteristics (e.g., employment source, employer, working hours and wages, earned income, etc.). New HEIGHTS also documents qualifying activities for CE requirements and can be linked with Medicaid claims, enrollment, and eligibility data. For the GA program, the system will generate monthly extracts that contain information on employment, income, member details, and other information between January 1, 2016, and a current date. The outcomes of this demonstration heavily rely upon employment and income outcomes; however, workforce and tax data will not be available for this evaluation due to legal restrictions. Thus, New HEIGHTS data extracts are particularly important for this evaluation.

Claims and Encounter Data. The Medicaid Management Information System (MMIS) is the repository of all state-based Medicaid claims, enrollment, eligibility, and encounter data. The data include utilization and payment for services provided and member eligibility status. In general, Medicaid encounters are received and processed by NH's fiscal agent on a weekly basis, with a historical data "run-out" period of three months. In addition, encounter and enrollment data from the NH PAP, from which many of the GA members were transferred, are important for the evaluation because they represent pre-demonstration data. These PAP members are considered Medicaid members, so their claims and encounter data will be available for this evaluation.

All Payer Claims Data: APCD data will allow the evaluation to track GA and in-state comparison group members' health outcomes and insurance coverage across payers. This data source is also critical because it is the only administrative source that provide information about coverage and health utilization/outcome information among former Medicaid GA members. APCD has a three-month data lag but more complete and reliable data are about three years old. However, NH's APCD currently is facing a legal barrier to linking Medicaid with other payers' data, although it is technically feasible. If this legal barrier cannot be removed and APCD is not usable, the evaluation will reply on an alternative data source (e.g., survey data, as described below).

CMS and NH monitoring metrics. NH collects monitoring metrics for the GA demonstration. Some of these metrics can be used as outcome measures (e.g., status of disenrollment due to noncompliance with CE requirement, status of re-enrollment after disenrollment for noncompliance) and others can be used as control variables (e.g., indicator of beneficiary exempted from CE requirement, number of beneficiaries with approved good cause circumstances, indicator of CE member meeting the requirement of engaging in qualifying activities, reason for exemption).

Quality Measure Database. Process-oriented quality measures such as those in CMS adult core set measures indicate the quality of care (e.g., antidepressant medication management, adolescent well care visit), which can be moderating variables to impact outcomes, particularly health-related ones. Outcome-oriented quality measures (e.g., emergency department visit, hospital readmission rate) can be included as program outcomes as well. Appendix A.2 lists *selected* CMS adult core set measures for this evaluation. These measures will be used for evaluating health outcomes and/or cost.

2.3.4.3 Primary Quantitative Data Collection

This evaluation has to rely heavily on beneficiary survey data as a core data source for outcomes. First, some outcome data, for at least short-term and intermediary outcomes such as labor force participation, are not easily accessible by NH DHHS. Second, the demonstration is concerned with the outcomes of former Medicaid members who have left Medicaid and either found ESI, bought private insurance coverage from the individual marketplace, lost coverage, or gone back to school. Data for these members are outside the administrative data systems (e.g., MMIS, New HEIGHTS). Unless the legal barrier to link Medicaid members with other payers' data is removed (which would be preferred), survey data will have to be the primary source to fill in the gaps of administrative data (i.e., New HEIGHTS).

Two phases of state beneficiary surveys are relevant to this evaluation:

- **State Baseline Beneficiary Survey:** The baseline survey will be conducted before the CE requirement is enforced so that the Independent Evaluator can have baseline data (i.e., anything not available from the administrative data) for both treatment and comparison group members. The survey data collection will be conducted after the EDD is approved by CMS (currently

estimated not until the end of the state fiscal year 2020). Therefore, the GA baseline survey will be conducted by NH's External Quality Review Organization (EQRO). Questions from this survey are included in Appendix A.3.

- **State Follow-up Beneficiary Survey**: The beneficiary survey for the GA evaluation will be designed and conducted by the Independent Evaluator. This survey aims to fill in the gaps in data elements from other sources, for example, missing data elements in New HEIGHTS for current members, and missing data for former Medicaid members.

Table 5 describes the state baseline and follow-up beneficiary survey data collection approaches.

Table 5. GA Evaluation Survey Sample Size and Timeline

Survey Wave	Survey Administrator	Survey Administration Timeline	Sample Size (T)		Sample Size (C)	
			Current Medicaid Member	Former Medicaid Member	Current Medicaid Member	Former Medicaid Member
Original Member Survey						
State Baseline Beneficiary Survey (for Pre-GA Information)	External Quality Review Contractor	SFY19–SFY20	1350*	N/A	1350*	N/A
State Follow-up Beneficiary Survey: Wave 1	Independent Evaluator	SFY21	3,500**		2,000**	
State Follow-up Beneficiary Survey: Wave 2	Independent Evaluator	SFY23	3,500**		2,000**	

Note: *This survey sample size is based on the guidance for conducting the Adult CAHPS Health Plan Survey 5.0H (Medicaid), described in CMS Core Set of Adult Health Care Quality Measures for Medicaid (Adult Core Set). https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf
**The distribution of sample size between current and former Medicaid members will vary a bit between follow-up waves 1 and 2 -up because of Medicaid churning and long-term program effect.
*** The current design treats new GA members in a separate sampling and data collection process and uses the same comparison group pool to draw the comparison group sample for the original member survey.

Sample Frame Development and Sampling: To compare members' Medicaid eligibility status and outcomes longitudinally, the evaluation will collect survey data at baseline (to capture pre-demonstration data) and during two follow-up waves. This survey will enable the comparison of outcomes, at the aggregate level, between baseline and follow-up time points.

At baseline, the survey sample will be drawn from treatment and comparison group members. The survey sample size will be based on the guidelines for conducting the Medicaid adult CAHPS surveys, that is, 1,350 per group. This sample size is expected to yield more than 400 completed surveys per group.

For the state follow-up beneficiary surveys, the evaluation will select a representative sample of a combined pool of current (including newly enrolled) and former Medicaid

members for the treatment and comparison groups. In each wave, the expected sample size for the treatment group, which includes current and former Medicaid members, is 3,500. This sample size accounts for GA enrollment information,[15] estimated survey response rates,[16] expected minimum number of completes (at least 411 completes for current members), reliability of survey estimates, and power calculation, as well as the need for oversampling because the response rate among former Medicaid members is expected to be lower than among current members. The expected sample size for the comparison group is 2,000 members per wave because the population size of the comparison group is expected to be smaller than the T group.

To ensure that the samples for the treatment and comparison groups accurately reflect the member population, the evaluation will employ *implicit random sampling*, which will include a variety of variables such as age, gender, race/ethnicity, income (compared to the FPL), current/former member indicators, geographic location, and length of enrollment in Medicaid. This approach will also help ensure that the samples are selected consistently between the two follow-up waves to enable reliable comparisons. The survey data will be weighted using the same variables to ensure that the weighted distribution of survey respondents accurately reflects the distribution of the member population on key population metrics, thus helping to correct for non-response bias.

Survey Questionnaire: A survey developed by the evaluation team will supplement information missing from administrative data and among former Medicaid members; therefore, the State Beneficiary Survey will include several question items, such as member employment status, education, receipt of employer-sponsored insurance through jobs and take-up rate, child care and transportation costs, and out-of-pocket medical costs. The questionnaire will be worded as closely as possible to what is available from administrative data, and for current Medicaid members, to enable valid comparisons. In addition, the evaluation will draw questions from standardized survey instruments, wherever possible. The evaluation team will pilot the survey before finalizing it. To be mindful of respondent burden, the survey will not exceed 15 minutes to complete.

Survey Mode: The Independent Evaluator will prepare each survey for three modes of data collection—mail, online (via smartphone, tablet device, and PC) and phone. The evaluation team will prepare a formatted print version to administer the survey by mail and programmable versions for online survey administration and telephone interviewing. Each version will be thoroughly tested for quality control. The survey will also be translated into Spanish. The survey will be mailed to all current and

[15] Approximately 50,000 GA members are currently enrolled in two Medicaid MCOs; the evaluation assumes a quarter of them are exempted from CE requirements.

[16] According to New Hampshire's Premium Assistance Program evaluation interim report, the adult Medicaid CAHPS survey response rate is 27.5% among Medicaid MCO members and 21.2% among PAP members. https://www.dhhs.nh.gov/ombp/medicaid/documents/nh2018-pap-interim-report.pdf. Accordingly, this evaluation assumes an average response rate of 25.0% for both treatment and comparison group members. Last accessed May 11, 2019.

former members in the selected sample together with a cover letter (which will include an online link to the survey), and a postage-paid business reply envelope. For members for whom email addresses are available, an email invitation with a link to the survey will be sent, followed by weekly reminder emails. Twenty-one days from the initial mailing, the evaluator will begin phone follow-up to non-respondents to administer the survey by phone. To maximize response rates, the team will make up to six phone attempts to each non-respondent at different times of day and during different days of the week, including weekdays and weekends.

Other Survey Considerations: Another consideration of the survey approach concerns hard-to-reach survey respondents, particularly those who have left Medicaid. The evaluation team will ask baseline survey respondents whether NH DHHS may contact them again in the future to see if their answers have changed. If they agree, the team will request their email and phone contact information. The survey will also use multi-modes to reach out to prospective survey respondents and maximize response rate.

2.3.5 Analytic Methods

2.3.5.1 Qualitative Data Analyses

Audio recordings of the KIIs and focus group discussions will be transcribed into Microsoft Word documents for analysis purposes. The qualitative data (program documents, interviews, focus groups) will be coded using software (e.g., Atlas.ti) using content or thematic analysis methods to identify themes. Two coders will code the data independently, and inter-rater reliability analysis will be conducted to confirm the reliability of each coding. Discrepancies between coders will be discussed for potential competing explanations, and coding refinement will be deployed afterwards. Patterns in the data will be identified and grouped into themes using an inductive approach.

In addition, this evaluation emphasizes the integration of data and the synthesis of findings from multiple data sources. For example, findings from the KIIs will be supplemented by findings from the document review. The evaluation will maintain an active list of program documents and other gray literature related to the CE policy. The analyses will also be framed to answer any inquiries that emerge from the quantitative analyses.

2.3.5.2 Quantitative Data Analyses

The quantitative analysis timeframe of the evaluation will be 2017–2018 (pre-GA demonstration) and 2019–2024 (post-GA demonstration).[17] The quantitative data

[17] When pre-GA demonstration data are not available, a possible alternative is to use the period of January through May 2019, when the GA program was put in place but the CE requirement had not been enforced; this period can be considered as an alternate pre-demonstration period. However, the use of this period will be

analysis, primarily for the program effectiveness (PE) evaluation, will use descriptive statistics and multivariate regression. As mentioned in section 2.4, a comparison group created through propensity score methods to control for confounding factors will be included.

Descriptive Statistics. The evaluation will first describe the demographic, socioeconomic, and regional characteristics of the treatment and comparison group members as well as subpopulations of special interest (e.g., those who comply or do not comply with the CE requirements) by year. Through bivariate analyses, cross-temporal comparisons (pre- and post-demonstration periods) and contemporaneous comparisons of treatment and control groups' characteristics and outcomes during the same period will be conducted, wherever data are available. These comparisons will use multiple statistical methods based on measurement properties. For example, nonparametric tests (e.g., McNemar's chi-square, Wilcoxon Signed Rank Test) will be used when the data are categorical or continuous but do not meet the assumptions (e.g., normality). Parametric analyses (e.g., t-tests) may be used as appropriate. A statistical significance level of p value less than or equal to 0.05 will be used in all statistical analyses.

Multivariate Regression Using Econometric Analysis Methods. Many changes in the New Hampshire environment may affect the health status of participants over the period of the demonstration, for example, long-term trends in improved health status; economic growth; employment levels; and the course of the opioid epidemic and other changes in public health. As a result, the QED approach will be particularly effective if the evaluation focuses on the effect of facing CE requirements, regardless of CE requirement compliance status, known as the intent-to-treatment (ITT) effect. The ITT effect captures the whole difference of outcomes. For this approach, what happens within the intervention period (e.g., program change, compliance with CE requirements, behavioral changes of program participants) is, in general, less relevant. This approach also allows the evaluation to track individuals' outcomes over a long span. Even if the original GA members have churned and changed coverage status, the evaluation still captures those post-Medicaid outcomes. This choice of analysis approach is also grounded with anticipated changes of CE requirements in NH. For example, beneficiaries' opportunities to resolve noncompliance issues will change over time: beginning May 1, 2020, members will be prohibited from curing deficient hours for a month during the following month. Furthermore, this approach also eliminates the possibility of including returning GA members as new treatment group members.

The evaluation will use the DD model. To estimate associations that can support stronger inferences, analyses must address potential biases arising from (1) population and system characteristics that differ between treatment and control

limited because when Medicaid members received notice of the upcoming CE requirements, their behavioral responses would have started and potentially impacted their outcomes. Therefore, using this as the alternative pre-demonstration period may lead to biased estimates of program impact. For this reason, the evaluation team will not use this alternative unless it is necessary due to data concerns.

group members and (2) unrelated secular trends occurring between the baseline (2017-18) and the Demonstration (2019–2024) periods. The DD model is an econometric method that controls for time trends in the outcomes of interest by comparing two groups over a study period. DD comparisons will estimate the counterfactual outcomes that would have been observed in the absence of the demonstration (D'Agostino, 1998; Rosenbaum, 1983). Bootstrap methods that reflect clustering adjustments will be used to calculate confidence intervals. The actual regression models will be based on the properties of the outcome measures. For dichotomous (i.e., yes or no) measures, the probability of success on a given measure will be predicted using logistic models. Rates (e.g., hospitalizations per 100 person-years) will be predicted using Poisson, negative binomial, or zero-inflated Poisson models, as appropriate. Continuous outcomes (e.g., expenditures) will be predicted using linear models.

In the regression analyses, the evaluation will include two types of control variables: quality of care measures and individual and regional characteristics. For quality of care measures,[18] the key data sources are the Health Care Effectiveness Data and Information Set (HEDIS) and the CMS Adult Core Set of Health Care Quality Measures. The individual characteristics include demographic and socioeconomic conditions of both the treatment and comparison groups. In addition, employment and income are largely influenced by regional economies and local job opportunities, which this evaluation will control for. For example, a higher employment rate in the region may be associated with better job outcomes for either GA or comparison group members. Areas with a higher prevalence of substance abuse may be associated with a sick population in general and more utilization of health care services.

Finally, the evaluation will control for other programs that may lead to spillover effects on the CE policy. For example, increased funding for SNAP-funded employment services will be a facilitator for members to comply with CE requirements and induce better job outcomes. During the interviews with program administrators, we will discuss other programs that may impact GA participants. We will then include indicator(s) for those programs in our analysis models, to the extent possible.

Survey Data Analysis and Reporting: For all outcome analyses that are based on survey sample(s), the evaluation will apply weights to the survey data to ensure that the weighted distribution of survey respondents accurately reflects the distribution of the member population on key population metrics, such as geographic location, gender, age, and exemption from the CE requirements.

Subgroup and Sensitivity Analyses. First, the evaluation will conduct subgroup analyses in the IE and PE analyses. For example, when conducting descriptive statistics, the evaluation will stratify the study population by (1) members' CE compliance status (similar to the four target groups in determining KII members so that findings from the IE and PE analyses can be cross-referenced); (2) geographic

[18] These measures are the most relevant for evaluating the impact on health outcomes.

locations defined by local employment or unemployment rates; age groups based on the ease of gaining employment (e.g., those above 50 years of age and those less than 50); (3) family structure (e.g., the number of children between seven to twelve years of age who tend to need parental or other adult supervision after school), and (4) other selected member characteristics.

Second, the evaluation will conduct a sensitivity analyses to validate the main findings from the analyses described above. One example is that, instead of the ITT, the evaluation will consider the TOT framework, which restricts the treatment sample to those who are fully compliant with CE requirements. The ITT method is appropriate for capturing the long-term effects of complex intervention, but it might derive a conservative estimate of program impact, depending on the extent and direction of behavioral responses to the CE requirements among GA members. Another example is to further restrict the comparison group selection pool to those Medicaid members with incomes in the range of 50% to 100% of the federal poverty level (FPL), at the time of original Medicaid eligibility determination. We avoid using members with incomes less than 50% of the FPL because their lower income level may make them too different from program participants who have incomes in the range of 100% to 138% of the FPL.[19] We also choose not to restrict the income range to a very narrow group close to the FPL because members in this group face a strong threshold effect, where even a very small change in income leads to their being subject to the CE requirements.

2.4 Methodological Limitations

This evaluation design anticipates several methodological limitations. The most challenging issues of this evaluation are data related. First, the evaluation places a heavy weight on employment- and income-related outcomes, several of which are not available from administrative data. There is also a legal barrier to merging Medicaid and non-Medicaid payers' claims in NH's APCD data. So, the evaluation has to reply heavily upon self-reported survey data, which are typically considered less reliable than administrative data. Second, even if administrative data are available, the corresponding data for former Medicaid members are not available, so the analyses need to be a hybrid of administrative and survey data. To minimize the impact of using a hybrid data for the same outcomes, with a resulting risk in measurement consistency and reliability, the evaluation will align the survey questionnaire with the administrative data elements as closely as possible.

The second data challenge is data quality. The New HEIGHTS data are reported by beneficiaries for eligibility determination, which is not immune from data completeness and accuracy issues. The data elements in New HEIGHTS do not directly map to the evaluation outcomes, for example, monthly working hours and income will be reported by New HEIGHTS, which need to be translated into total hours worked in the past six months or year. The evaluation team will conduct a

[19] Should we find that the number of comparison group members is too small after income restriction, we may relax the income threshold to maintain the power of the analysis.

validation of the New HEIGHTS data at the beginning of the evaluation to ensure that the extracts from this administrative data source align with what is needed by this evaluation.

The third challenge is attribution and non-response to data collection efforts by members who have left Medicaid. These members are hard-to-follow populations, especially those who have been much better off as a result of the CE program and will not return to Medicaid in the near future. As discussed, the evaluation will ask members about their contacts and willingness to follow up, so that data can still be collected from them. Mixed-methods survey mode including up to 6 attempts of phone follow-ups is also expected to increase the outreaches to former Medicaid members.

In addition to data issues, confounding factors also increase the risk of estimate bias. For example, Medicaid members churn on and off and may be exposed to other policies or other factors that make it harder to tease out the CE program effect from others. Local economies and members' motivation to be self-sufficient also contribute to member outcomes and lead to selection and estimation bias. Also, the CE and RE policies are implemented simultaneously; the effect from RE may be added to those from CE, making it hard to disentangle. Therefore, this evaluation will use DD model and match methods to limit and control for underlying differences between members and derive unbiased estimates.

Finally, programs mature and change during a long evaluation and observation period. The document review and interviews with program staff and members in multiple rounds will inform the evaluation about any changes. The use of ITT evaluation, member follow-up data collection over multiple years, and the inclusion of original and new CE program participants as well as members that have left Medicaid will all yield valuable information for a complete and longitudinal picture of program impact.

3. Evaluation Design for the Retroactive Eligibility Elimination Demonstration

3.1 General Background Information

As authorized by federal law, the retroactive eligibility (RE) policy provides coverage to beneficiaries for their unpaid medical expenses, up to three months prior to their Medicaid application dates. This retroactive coverage is granted when the beneficiaries are deemed Medicaid eligible. The policy provides coverage protection for Medicaid members, but it also has the expected effect to delay their Medicaid applications till they incur medical expenses. As a result, states have used Section 1115 waiver authority to eliminate or limit RE for all or part of their Medicaid populations, including adults and children.

In New Hampshire, the RE waiver policy, effective from January 1, 2019, to December 30, 2025, is applied to all GA members statewide. The policy eliminates RE eligibility and is one of the two joint waiver policies of the entire GA waiver demonstration, along with CE. The primary goal of NH's RE waiver is to test whether eliminating RE encourages people to sign up for and maintain coverage when healthy, as opposed to signing up after they become sick. Also, it is expected that the RE waiver will promote enrollment and eligibility continuity, lead to increased continuity of care by reducing coverage gaps that occur when people churn off and on Medicaid, and ultimately improve health outcomes.

3.2 Evaluation Hypotheses and Research Questions

Similar to the design for CE policy, the RE evaluation design starts from a logic model, and proceeds to evaluation questions and hypotheses.

Logic Model. Includes the logic model for evaluating the RE policy, based on policy goals articulated in demonstration approval letters from CMS. This logic model will guide the choice of measures and outcomes in the evaluation as well as the modeling of the analyses. The moderating and contextual factors are also included in the design Table 6. With members' better understanding of the waiver policy, removal of the barriers to benefit renewal, value placed on coverage, and providers' use of presumptive eligibility, the waiver policy is expected to achieve the goals described in Section 3.1.

Hypotheses and Research Questions. Similar to the evaluation of the CE policy, the evaluation of RE includes primary and subsidiary questions. The difference is that eliminating RE represents a more straightforward change in the revised eligibility/ coverage rule that is captured by the Medicaid eligibility review system. This policy change is directly administered by NH DHHS in the eligibility review system that screens and reviews members for Medicaid eligibility. Medicaid applicants have limited opportunities, other than changing their incentives and the timing of their Medicaid applications, to influence the quality of program implementation. Therefore,

the RE evaluation will lean more heavily on program effectiveness (PE), with just a small number of additional questions about implementation effectiveness (IE).

Hypotheses and Research Questions for the IE Evaluation. The IE evaluation of the RE policy will examine New Hampshire's ability to appropriately exempt people. A list of IE questions is shown below. Interviews with program staff and members will generate data for this evaluation.

- What are NH's efforts to let uninsured individuals know about the new restriction of RE?
- What are the steps taken and associated costs to eliminate RE eligibility?
- Are there any delays in implementing this policy due to system issues?
- Are there known barriers to and facilitators of implementing this policy?
- What is the appeals process for applicants? How has it changed over time?
- How has the number of Medicaid enrollees changed?

Hypotheses and Research Questions for PE Evaluation. The hypotheses to evaluate the RE are the four as described below. Detailed questions are included in **Table 6**, with a detailed measure table for all measures in **Attachment A.5**.

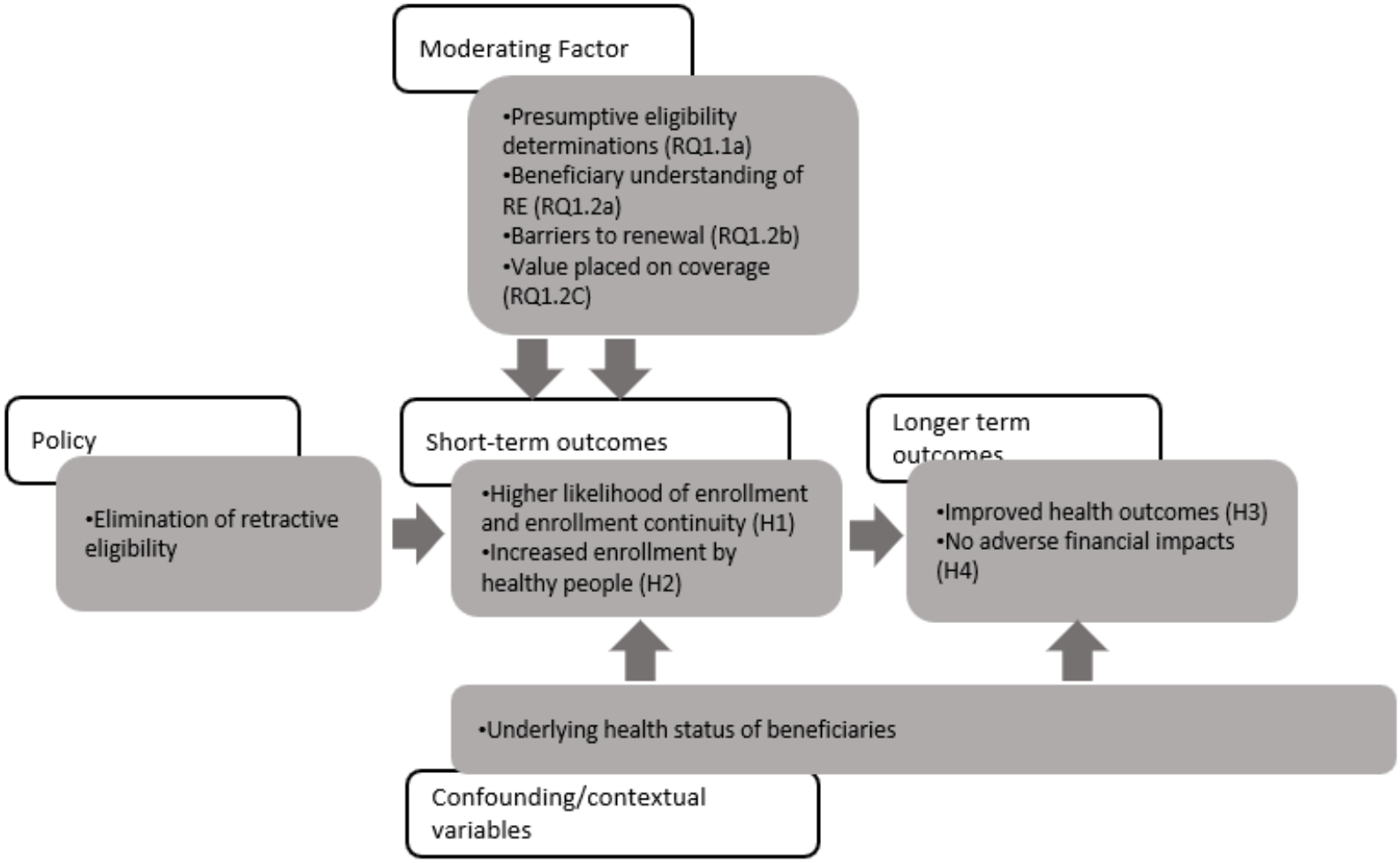
Hypothesis 1: Eliminating retroactive eligibility will increase the likelihood of enrollment and enrollment continuity.

Hypothesis 2: Eliminating retroactive eligibility will increase the enrollment of eligible people when they are healthy relative to those eligible people who have the option of retroactive eligibility.

Hypothesis 3: Through greater continuity of coverage, health outcomes will be better for those subject to retroactive eligibility waivers compared to other Medicaid beneficiaries who have access to retroactive eligibility.

Hypothesis 4: Eliminating retroactive coverage eligibility will not have adverse financial impacts on consumers.

Figure 2. Logic Model of Evaluating the Waiver to Eliminate Retrospective Eligibility



Note: The model is reproduced from CMS evaluation guidance.

Table 6. Comparison Strategies, Measures, Data sources, and Analytic Approaches for RE Evaluation

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
Hypothesis 1: *Eliminating RE will increase the* ***likelihood of enrollment and enrollment continuity***				
Primary research question 1.1: Do eligible people subject to RE waivers **enroll in Medicaid at the same level** as other eligible people who have access to RE?				
NH's non-GA Medicaid beneficiaries matched with GA members	Number of individuals enrolled in Medicaid by eligibility group and by month Number of new enrollees (i.e., enrollment by those without a recent spell of Medicaid coverage) in Medicaid by eligibility group and by month	Treatment and comparison (T&C) group populations; subgroup by eligibility category and month	MMIS/Medicaid eligibility and enrollment data	Descriptive statistics of total enrollment pre- and post-demonstration; interrupted time series (ITS)
Subsidiary research question 1.1a: Are there changes in **the rate of presumptive eligibility determinations** after the elimination of retroactive eligibility?				
NH's non-GA Medicaid beneficiaries matched with GA members	Probability of a presumptive eligibility determination	Treatment and comparison (T&C) group populations	MMIS/Medicaid eligibility and enrollment data	DD model
n.a.	Reported changes in providers' presumptive eligibility activities in response to retroactive eligibility waiver	Providers subject to survey	Abbreviated provider survey	Descriptive qualitative analysis of presumptive eligibility determinations
Primary research question 1.2: What is the likelihood of **enrollment continuity** for those subject to a RE waiver compared to other Medicaid beneficiaries who have access to retroactive eligibility?				
NH's non-GA Medicaid beneficiaries matched with GA members	Probability of remaining enrolled in Medicaid for 12, 18, 24 consecutive months	Treatment and comparison (T&C) group populations	MMIS/Medicaid eligibility and enrollment data	DD model of enrollment continuity among beneficiaries starting a new spell of enrollment in Medicaid (enrollment by those without a recent spell of Medicaid coverage)
NH's non-GA Medicaid beneficiaries matched with GA members	Number of months with Medicaid coverage (1-12)	Treatment and comparison (T&C) group populations	MMIS/Medicaid eligibility and enrollment data	DD model
Subsidiary research question 1.2a: Do beneficiaries subject to the RE waiver **understand that they will not be covered during enrollment gaps?**				
n.a.	Reported knowledge of Medicaid policy on coverage during enrollment gaps	T population subject to survey	State beneficiary follow-up survey; member interview	Descriptive qualitative analysis

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
Subsidiary research question 1.2b: What are common **barriers** to timely renewal for those subject to a RE eligibility waiver?				
n.a.	Reported barriers to timely renewal	T population subject to survey	State beneficiary follow-up survey; member interview	Descriptive qualitative analysis
Subsidiary research question 1.2c: Among beneficiaries subject to the RE waiver, is **timely renewal** more likely by those who might be expected to **value coverage highly** (for example, those with higher risk scores or more chronic conditions), relative to those who might value coverage less (for example, because they are healthy)?				
Compare to other beneficiaries subject to waiver who are due for renewal, by health status	Probability of coverage gap* for 1, 2, or 3 months among those who are eligible	T and C populations	MMIS/eligibility, enrollment and encounter data	Regression model estimating association of health status (e.g., chronic conditions; risk scores) and/or prior health care use (e.g., hospital stay, ER visit) with coverage gap
Primary research question 1.3: Do beneficiaries subject to RE waivers who disenroll from Medicaid have **shorter enrollment gaps** than other beneficiaries who have access to retroactive eligibility?				
NH's non-GA Medicaid beneficiaries matched with GA members	Probability of re-enrolling in Medicaid after a gap in coverage up to a fixed number of observable months (i.e., 6 months) Number of months without Medicaid coverage up to a fixed number of observable months (i.e., 6 months)	T and C populations	MMIS/eligibility and enrollment data	DD model of reenrollments in Medicaid among beneficiaries who disenrolled from Medicaid
Hypothesis 2: *Eliminating retroactive eligibility will increase enrollment of eligible people when they are* ***healthy r****elative to those eligible people who have the option of retroactive eligibility.*				
Primary research question 2.1: Do newly enrolled beneficiaries subject to a waiver of RE have **higher self-assessed health status** than other newly enrolled beneficiaries who have access to RE?				
NH's non-GA Medicaid beneficiaries matched with GA members	Reported excellent or very good health status (physical and/or mental health status); Reported prior year utilization (e.g., hospital stay, any ER visit)	T&C populations subject to survey	State follow-up beneficiary survey**	Post-demonstration regression model
Hypothesis 3: *Through greater continuity of coverage****, health outcomes*** *will be better for those subject to RE waivers compared to other Medicaid beneficiaries who have access to RE.*				

Comparison strategy	Outcome measure(s)	Sample or population to be compared	Data sources of outcome measures	Analytic approach
Primary research question 3.1: Do beneficiaries subject to the RE waiver have **better health outcomes** than other beneficiaries who have access to RE?				
NH's non-GA Medicaid beneficiaries matched with GA members	Change in physical and mental health status Number of outpatient visits Number of ED visits Number of inpatient admissions	T&C populations subject to survey	State follow-up survey for RE CMS adult core set measures	DD regression model of change in self-reported health status; ITS
Hypothesis 4: *Elimination of retroactive coverage eligibility will not have* ***adverse financial impacts*** *on consumers.*				
Primary research question 4.1: Does the RE waiver lead to **changes in the incidence of beneficiary medical debt**?				
NH's non-GA Medicaid beneficiaries matched with GA members	Reported medical debt (medical bills)	T&C populations subject to survey	State follow-up survey for RE	Regression model

Note: The target population is demonstration beneficiaries subject to retroactive eligibility waiver unless otherwise noted in the analytic approach.

*The New Hampshire data do not allow for the identification of "timely renewal" cleanly; therefore, the evaluation uses coverage gap as an alternative to the timely renewal measure.
**CMS RE evaluation guidance was not available when the program started, which impacted NH's ability to collect baseline data.

3.3 Methodology

3.3.1 Evaluation Design Summary

The general evaluation approaches will be very similar to the ones for CE evaluation, that is, a QED approach grounded with a DD model and supplemented by ITS. Both primary and secondary data, including qualitative and quantitative information, will be collected to support the evaluation analyses. Because all CE program participants are subject to the RE elimination policy and take up most of the RE population as well, the RE evaluation will be coordinated closely with the CE evaluation in terms of the samples and mechanism of data collection.

3.3.2 Target and Comparison Group

The RE policy is targeted to all GA members regardless of whether a member is mandated to comply with CE requirements. Therefore, the treatment group for RE evaluation will be all new GA members in the two MCOs, and additional GA members enrolled into the third MCO starting in September 2019. The in-state comparison group will consist of non-GA members in those MCOs, who are matched with the treatment group, similar to the process of creating the comparison group for the CE waiver (discussed in Section 2.3).

3.3.3 Evaluation Period

The RE demonstration will run from January 1, 2019 through December 31, 2023. The evaluation period will be January 1, 2017, through December 31, 2025 when New HEIGHTS data are used for outcomes; when outcomes are solely based on survey data, the evaluation period will be July 1, 2018, through December 31, 2025.

3.3.1 Data Sources

3.3.1.1 Qualitative Data Collection

The qualitative data include a provider survey, a member survey, KIIs and focus groups with members, and KIIs with program administrators/staff.

Abbreviated Provider Survey. For all providers, an abbreviated online survey (up to 5 minutes for completion) will be conducted with qualified entities[20] that determine presumptive eligibility. These qualified entities can be hospitals, primary care physicians (or nurse practitioners), physicians, local health departments, school clinics, community and rural health care centers, pharmacies, surgeons, behavioral health specialists, etc. The survey will be administered to all providers in the Medicaid claims database. The key questions to be asked are providers' understanding of RE, their

[20] Entities that determine presumptive eligibility must be certified by the states. https://familiesusa.org/sites/default/files/product_documents/Presumptive-Eligibility.pdf

presumptive eligibility activities, and providers' perceived impact of waiver policy on patients. By the time the evaluation starts, the RE will have been implemented for a few months. Consequently, the survey will have to ask providers to recall changes in their presumptive eligibility activities since the RE waiver started. This survey will be administered in three waves so that changes in providers' responses can be studied.

KII and Focus Groups. For a series of IE-related questions, such as knowledge of Medicaid policy on coverage during enrollment gaps, and barriers to timely renewal of Medicaid coverage, KIIs and focus groups will be conducted. Based on the scope of the IE evaluation for the RE waiver policy, the KII and focus group data will be more limited than the data for the CE waiver evaluation. Data will be collected from those who are newly enrolled in Medicaid and those who renewed their Medicaid coverage after the RE waiver was implemented. Because of the significant overlap of program administrators and participants between the RE and CE policies, whenever possible the data collection for these two evaluations will be coordinated in terms of study sample sampling, outreach to members, and survey and interview questions. In addition, for any members not in CE but in RE, additional data collection will be conducted as well. For GA members who are subject to CE, RE-related interview questions will be added to the interview/focus group protocol for the CE evaluation. For those who are not subject to CE requirements, the evaluation will conduct up to a total of two focus groups in each of two rounds, among non-CE GA members, to collect qualitative data.

RE State Follow-up Beneficiary Survey. The RE evaluation calls for a small number of survey questions being administered to T and C members in the RE evaluation, as described in Table 6. Due to constraints in administrative resources, there will be no baseline survey for RE evaluation. However, brief beneficiary follow-up surveys will be conducted in two waves and coordinated with the CE state beneficiary follow-up survey. The targeted sample size for the RE evaluation will also be 3500 and 2,000 for the T and C groups, respectively. The RE and CE evaluations will coordinate on the survey sampling. Specifically, for the sampled CE members, additional RE-related questions will be added to the CE questionnaire, expanding the survey to an 18-minute questionnaire. For the non-CE members in the RE evaluation, the evaluation will sample an additional total of 1,430 members from the T and C groups for a 5-minute survey. The two segments of sampled members' data will be combined to serve the needs of the RE evaluation. This level of coordination minimizes the outreach to survey respondents and reduces response confusion and burdens.

3.4.2 Quantitative Data Collection

The quantitative data for the RE evaluation includes state administrative records such as eligibility, enrollment, claims and encounter data. In addition, the state beneficiary survey will support the development of several outcome measures, as described in Table 6. The evaluation team will work with NH DHHS to acquire these data.

3.4.5 Analytic Methods

Qualitative Data Analyses. Through surveys with providers and surveys/interviews/ focus groups with members, data will be collected to capture outcomes related to the

following: (a) reported changes in providers' presumptive eligibility activities in response to the retroactive eligibility waiver; (b) reported knowledge of Medicaid policy on coverage during enrollment gaps; (c) reported barriers to timely renewal of Medicaid coverage among those subject to the RE requirements; (d) reported excellent or very good health status; and (e) reported prior year utilization. Descriptive analyses will be conducted using the qualitative data. For any additional interview/focus group data analyses, software such as Atlas.ti will be used. Double-coding will be used both to test the coding themes and to ensure inter-rater reliability of the analyses.

Quantitative Data Analyses. The quantitative analysis methods are very similar to those the evaluation team will use to evaluate the CE waiver. Descriptive statistics will be created to profile study populations and outcome measures. For outcomes that are available for both the T and C groups before and after the GA demonstration, the DD regression model will be used wherever applicable.

In addition, the DD method will be supplemented by interrupted time series (ITS) methods (Penfold 2013; Shadish 2001) for measures that can be calculated at quarterly or monthly frequencies, with seasonal adjustments. The ITS technique is useful to evaluate the longitudinal effects of health policy interventions, especially when a policy intervention is initiated across a class of members at the same point in time. Compared to DD, ITS will identify changes both at the absolute level and as trends. Because changes in health status are slow and difficult to achieve, we expect that any improvement in health that may result from the RE requirements would be demonstrated by a small increase in the upward trend of the health status of the treatment group over time; in this sense, ITS is preferred. The evaluation will select the relevant method for a specific outcome based on the number of data points available as well as the result of a data quality review.

Subgroup analyses will also be conducted. For example, the analyses will distinguish individuals who are healthy vs. those with complex medical needs.

3.4 Methodological Limitations

Data is also a limitation of the RE evaluation. First, several outcomes are based on a hybrid set of enrollment and survey data; this situation is less desirable compared to one that uses single data source. Second, because those members at the start of the GA program may not be on Medicaid prior to this demonstration, the pre-demonstration data may lose information on them. However, the second concern is not major because pre-demonstration data will be collected from the population of all current members at program start date. The evaluation will compare aggregate estimates across diversified T and C group members and between time points.

The effect of RE may be confounded by the CE policy. If the CE policy introduces positive results to members' employment and thus health outcomes, the effect of RE will be upward biased. Therefore, the RE evaluation will control for the fact of whether a member is subject to CE requirements.

There is also a potential risk for providers not responding to the survey. The evaluation

will review non-response bias (e.g., what types of providers did not respond, the level of non-response, etc.) and make necessary adjustments to survey approach.

4. Evaluation Design for Sustainability and Cost Impacts of the GA Demonstration

4.1 General Background Information

Ensuring the sustainability of the state Medicaid program is important for the NH DHHS, the Medicaid program, and stakeholders, as well as for CMS. The NH GA demonstration, which includes both CE and RE waiver policies, is a 5-year investment to improve employment and health for low-income individuals and their families. Implicit is the understanding of the impact of the demonstration on administrative and health care costs. This section describes the evaluation team's approach to understanding the cost impact and sustainability of the 1115 GA demonstration.

4.2 Evaluation Hypotheses and Research Questions

There are no hypotheses for costs and sustainability associated with the RE and CE policies as NH did not seek 1115 authority with a goal to reduce costs to the NH Medicaid program. While there are no hypotheses, NH does recognize the importance of monitoring the impact of the CE and RE policies on administrative costs, health care costs, and provider uncompensated care to better understand the overall impact of the GA program.

Three key research questions, as called out by the CMS STC and the evaluation guidance, are shown below. Detailed questions, data sources, and analysis methods are discussed in the following sections. Attachment A.5 includes a detailed measure table for all outcome measures included in **Table 7**.

Research question 1: What are the administrative costs incurred by the state to implement and operate the demonstration?

Research question 2*:* What are the short- and long-term effects of the GA demonstration on Medicaid health service expenditures?

Research question 3: What are the impacts of GA demonstration on provider uncompensated care costs?

Three types of key cost measures will be developed to address these questions.

Administrative costs. The evaluation will compute the administrative costs associated with demonstration startup and ongoing demonstration operations. Specific administrative costs, or the program costs of implementing the waiver demonstration, to be examined include the cost of (1) contracts or contract amendments to implement demonstration policies, as well as those for monitoring and evaluation; (2) the time of staff hired or assigned to implement, administer, and communicate with beneficiaries about demonstration policies, such as premium collection, health behavior incentives, and/or community engagement requirements; and (3) the administrative cost to state agencies partnering with Medicaid to implement and operate the demonstration. The

first two items are costs to Medicaid. Some of these program costs may be redirected to the demonstration from other Medicaid operations in whole or in part. The data for the administrative cost will come from documentation from NH DHHS (e.g., quarterly and annual CMS-64 forms) and up to four interviews with NH GA program staff in two rounds as well.

Health Service Expenditures. Health service expenditures will be quantified both in terms of the total cost spent on care and the per member per month (PMPM) expenditure. For each program year, the expenditure will be described based on Medicaid covered services at the beneficiary level derived from claims and encounter data and, separately, based on which programs are included in the analyses (GA vs. comparison group). We will compare expenditures during the pre-GA (2017–2018) and post-GA (2019–2024) periods.

Financial Effects on Providers' Uncompensated Care. Health care providers (e.g., hospitals or primary care) may provide care or services that cannot be reimbursed. Often uncompensated care arises when people do not have insurance and cannot afford to pay the cost of care. Medicaid-eligible adults may receive care before their eligibility is determined; before the RE waiver, they could receive retrospective coverage, but now they cannot. This is one significant source of uncompensated care. On the other hand, if CE policy drives noncompliant Medicaid members to lose coverage, providing health care to these former Medicaid members may add to the burden of uncompensated care. For this cost measure, Healthcare Cost Report Information System (HCRIS) data will be preferred. If these data are not available, provider survey data will be used to understand uncompensated care by hospitals and other providers, including Federal Qualified Health Centers (FQHCs).

Table 7. Comparison strategies, Measures, Data sources, and Analytic Approaches for GA Cost Evaluation

Comparison strategy	Outcome measures	Sample or population to be compared	Data sources of outcome measures	Analytic approach
Research question 1: What are the **administrative costs** to implement and operate the demonstration				
n.a.	Administrative cost of demonstration **implementation**, including 1) cost of contracts or contract amendments, and 2) staff time equivalents required to establish demonstration policies, typically incurred in the initial year of the demonstration	Medicaid Program	State and managed care administrative records; Semi-structured Interviews with state program administrators/staff and state agency partners	Descriptive analysis of administrative costs
n.a.	Administrative cost of **ongoing** demonstration **operation** (FY2019-2024), including 1) cost of contracts or contract amendments, and 2) staff time equivalents required to administer demonstration policies	Medicaid Program	State and managed care administrative records; Interviews with state agency staff and partner organizations; E&C monitoring metric AD-45	Descriptive analysis of administrative costs
n.a.	Administrative costs to state agencies partnering with Medicaid to implement and operate the demonstration	State Agency Partners	Interviews with state agency staff and partner organizations	Descriptive analysis of administrative costs
Research question 2: What are the **short- and long-term effects** of the GA demonstration on **health service expenditures?**				
n.a.	Total health service expenditures	Treatment group members	MMIS eligibility, enrollment, and claims/ encounter data	Descriptive statistics of cost trends; ITS
NH's non-GA beneficiaries matched with GA members	PMPM health service expenditures	Population; subsamples	MMIS eligibility, enrollment, and claims/ encounter data; PAP encounter data	DD model; ITS
Research question 3: What are the impacts of the GA demonstration on provider **uncompensated care costs?**				
n.a.	Reported uncompensated care by hospitals and other providers, including FQHCs	Providers (or providers selected for survey)	HCRIS S-10 data* (or state provider survey)	Descriptive quantitative analysis; ITS if HCRIS data are available for the evaluation

* HCRIS S-10 data may have up to a 4 year delay to reflect the final uncompensated care totals that result from reconciliation and audits. Early results will be used with caution.

4.3 Methodology

4.3.1 Evaluation Design Summary

The evaluation of program cost and sustainability will also use mixed methods and multiple data sources. Claims/encounters, survey, and KII/focus group data will be collected. The approach to addressing each of the hypotheses will be similar to those used for the CE and RE evaluations. The DD model will be supplemented by ITS as appropriate. Data collected through interviews with GA program administrators/staff/SMEs will be enriched with data collected through secondary sources such as claims/encounters, cost reports, etc., as shown in **Table 7**.

4.3.2 Target and Comparison Group

For the demonstration policy impact on cost, the evaluation considers the GA demonstration as a whole rather than the two distinct waiver policies. Therefore, the treatment group is the entire group of GA members, the same as for the RE waiver evaluation. The comparison group consists of non-GA program members in those Medicaid MCOs, who are matched with the treatment group members. According to CMS guidance, a comparison group is not expected for administrative cost measures.

4.3.3 Evaluation Period

The evaluation period is consistent with that for the RE and CE evaluation, that is, January 1, 2017, through December 31, 2025. For certain outcome measures such as uncompensated care, the evaluation will include years back to January 1, 2015 if the HCRIS data are available.

4.3.4 Data Sources

Primary Data Collection. For uncompensated care, the evaluation will focus on SafeNet providers in NH. These providers include disproportionate share hospitals, community health centers, FQHCs, rural health centers, etc. The evaluation assumes that HCRIS data, particularly worksheet S-10 data, will be available to the evaluation team. Historic data will permit the team to use the ITS method to review trends in cost changes over time.[21]

In addition, state administrative cost data will be collected through up to 4 interviews with staff program administrators/staff/SMEs. On a snowballing basis, these interviews will yield information on all cost-related documents (or data files such as quarterly and annual CMS-64 forms) necessary for the evaluation and identify other SMEs or key

[21] Should the HCRIS data not be available, the evaluation will conduct an abbreviated provider survey, to be completed through an online link and mailed or emailed to these providers. The survey questionnaires will include provider's awareness of the 1115 waiver policies, observed changes in patients without insurance, total uncompensated care charges (i.e., bad debt and the financial assistance), cost-to-charge ratio, and total uncompensated care cost.

informants to inquire of additional data.

Secondary Data Collection. The evaluation will use Medicaid and PAP claims, eligibility, and enrollment data to calculate total health care expenditures and PMPM cost during the evaluation period. Healthcare services cost will be quantified both in terms of the total dollars spent and per member per month (PMPM) expenditure rates. For each month, the expenditures will be described based on all Medicaid covered services and, separately, based on which services were included.

4.3.5 Analytic Methods

Qualitative Analysis Method. The qualitative analyses will be limited compared to the RE and CE evaluations. The data will be obtained largely from documents specifying administrative costs and staff's perceptions of the drivers of costs. The evaluation will summarize the information obtained from the interviewees and provide context to the findings of quantitative cost analyses described below.

Quantitative Analysis Method. For both administrative cost and uncompensated care, the analyses will be descriptive in nature. For administrative cost, a description of total administrative cost with itemized costs (if available) will be provided, as well as the trend of these costs on an annual basis. For uncompensated care, the evaluation will compare the cost before and after the GA demonstration. The costs will be broken down by the provider type (safety net hospitals, FQHCs, community health centers, etc.). The itemized cost will inform the drivers of the cost.

For healthcare service expenditure, the evaluation will use individual-level data and the DD model to examine the change in service expenditures between treatment and comparison group members with similar characteristics. To better understand changes in expenditure patterns over time, ITS analyses will be conducted whenever data with multiple intervals are available.

To facilitate the understanding of the drivers of total cost of care, the evaluation will investigate medical vs. pharmacy costs, based on capitated payment rates. The evaluation will also distinguish the cost by individual characteristics through subgroup analyses. For example, the evaluation will distinguish the cost for healthy members compared with the cost for those with complex medical needs, those subject to CE requirements compared with those who are not (in the case of PMPM cost).

4.4 Methodological Limitations

Because the waiver policies are applied to MCOs, the robustness of the cost analyses depends on the reliability of the encounter data submitted by the MCOs to NH DHHS. Interviews with DHHS program staff will provide the evaluation with contextual information on the reliability of the data and insights on how to correct lingering data quality issues.

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Attachments

A.1. Selection of Independent Evaluator

A.2. Evaluation Budget

A.3. Evaluation Timeline

A.4. Pathways of GA Members' CE Compliance and Coverage Status

A.5. Measure Tables

A.6. Questionnaire of State Baseline Beneficiary Survey for the GA Program

Attachment A.1. Selection of Independent Evaluator

In March 2019, NH DHHS selected University of Massachusetts Medical School (UMMS) as the Independent Evaluator for the overall 1115 GA Demonstration, through a competitive procurement process. UMMS has expertise in the rigorous evaluation of Medicaid programs, having conducted extensive evaluation work on past 1115 demonstration projects related to eligibility, coverage policies and delivery system changes. For example, UMMS evaluated the Patient-Centered Medical Home Initiative and currently is evaluating the state's Medicaid Delivery System Reform Incentive Payment (DSRIP) demonstration, a 1115 substance use disorder waiver, and several coverage-related waivers (e.g., provisional eligibility, sustainability for safety net providers) programs. UMMS also has significant experience partnering with health and human services agencies, not-for-profits, and other organizations to evaluate programs and support evidence-based policymaking. These experiences and competencies uniquely position UMMS to perform this work for CMS and NH DHHS. Faculty members and staff participating in the demonstration evaluation have been drawn from the Division of Public and Private Health Solutions in Commonwealth Medicine at UMMS, faculty from University of Massachusetts Amherst, and the Cutler Institute at the University of Southern Maine; in addition, faculty members from UMMS' Dept of Population and Quantitative Health Science who are leading the Massachusetts' 1115 DSRIP evaluation will serve as scientific advisory group members.

NH DHHS has executed a contract with UMMS to evaluate the 1115 GA Demonstration. The contract specifies that UMMS will be responsible for:

- Accessing existing NH data sources;
- Conducting primary data collection through surveys and qualitative data;
- Calculating performance and outcome measures;
- Conducting Data analysis; and
- Preparation of draft and final evaluation designs for CMS approval as well as the completion of interim and final evaluation reports for the GA evaluation, consistent with Demonstration STCs.

With respect to Conflict of Interest, UMMS will be responsible for preparation of draft and final evaluation designs for CMS approval; upon approval of the design and budget for the entire evaluation, UMMS will be responsible for the completion of interim and final evaluation reports for the GA evaluation consistent with Demonstration STCs. UMMS will share preliminary versions of the interim and final evaluation reports to NH DHHS for comments and correction of any factual errors. UMMS will have final editorial control over the content of the Interim and Final Evaluation reports to CMS. The State of NH will retain responsibility for the program monitoring activities outlined in the STCs.

Attachment A.2. Evaluation Budget

The estimated budget for the Independent Evaluator for the period (SFY21 - SFY 26) is $1,499,961. The breakdown of cost by major evaluation milestones are described below.

Evaluation Milestones	Staff Cost	Administrative and Other Cost	Total Cost
Evaluation Implementation Plan	$31,457	$9,331	$40,788
Data Analytic Plan	$31,532	$9,353	$40,885
Development and fielding of all beneficiary surveys	$263,115	$78,043	$341,158
Development and fielding of provider survey	$12,000	$3,559	$15,559
Qualitative and Quantitative Data Collection	$142,877	$50,159	$193,036
All Data cleaning and analyses	$430,300	$127,632	$557,932
Monthly/Quarterly/Annual Reports	$39,683	$11,770	$51,453
Draft and Final Interim Reports	$78,039	$23,147	$101,186
Policy Briefs/Presentations	$40,040	$11,876	$51,916
Draft and Final Summative Reports	$81,789	$24,259	$106,048
Total	**$1,150,831**	**$349,129**	**$1,499,961**

Attachment A.3. Evaluation Timeline

	Granite Advantage Waiver Evaluation (Calendar Year 4/5/2019-12/31/2025)																											
	FFY19			FFY20				FFY21				FFY22				FFY23				FFY24				FFY25				FFY26
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	CY19 Demo Year 1				CY20 Demo Year 2				CY21 Demo Year 3				CY22 Demo Year 4				CY23 Demo Year 5				CY24 N/A				CY25 N/A			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	SFY19			SFY20				SFY21				SFY22				SFY23				SFY24				SFY25				SFY26
KET DELIVERABLE AND MILESTONES	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Demonstration Program Implementation Schedule																												
Launch of the GAHCP program	X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—								
Granite Workforce Pilot implementation	—	—																										
Phase 2 Evaluation Schedule																												
Submit Implementation Plan							X																					
Submit Monthly Status Report*							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Submit Quarterly Reports							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Submit Data Analytic Plan							X																					
Submit Policy Briefs**							—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prepare and conduct Presentations**							—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Submit Annual Reports									X				X				X				X				X			
Submit Draft Interim Evaluation Report***															X													
Submit Final Interim Evaluation Report																	X											
Submit Draft Final Evaluation Report																										X		
Submit Final Evaluation Report																												X
Select Phase 2 Evaluation Data Collection and Analytic Activities																												
Quantitative data acquisition							—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Quantitative data analysis							—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Interview questionnaire coding scheme development							—	—	—																			
KII data collection									X	X							X	X										
KII data analysis										X	X	X						X	X	X								
Focus group questionnaire development							—	—	—																			
Focus group data collection											X								X									
Focus group data analysis											X	X							X	X								
Survey questionnaire development and testing							—	—	—	—																		
Survey sampling and data collection									X	X			X	X			X	X										
Survey data analysis										X	X	X		X	X	X		X	X	X								

Note: X Deliverable or activity; —— Ongoing activity — — Ad-hoc activities

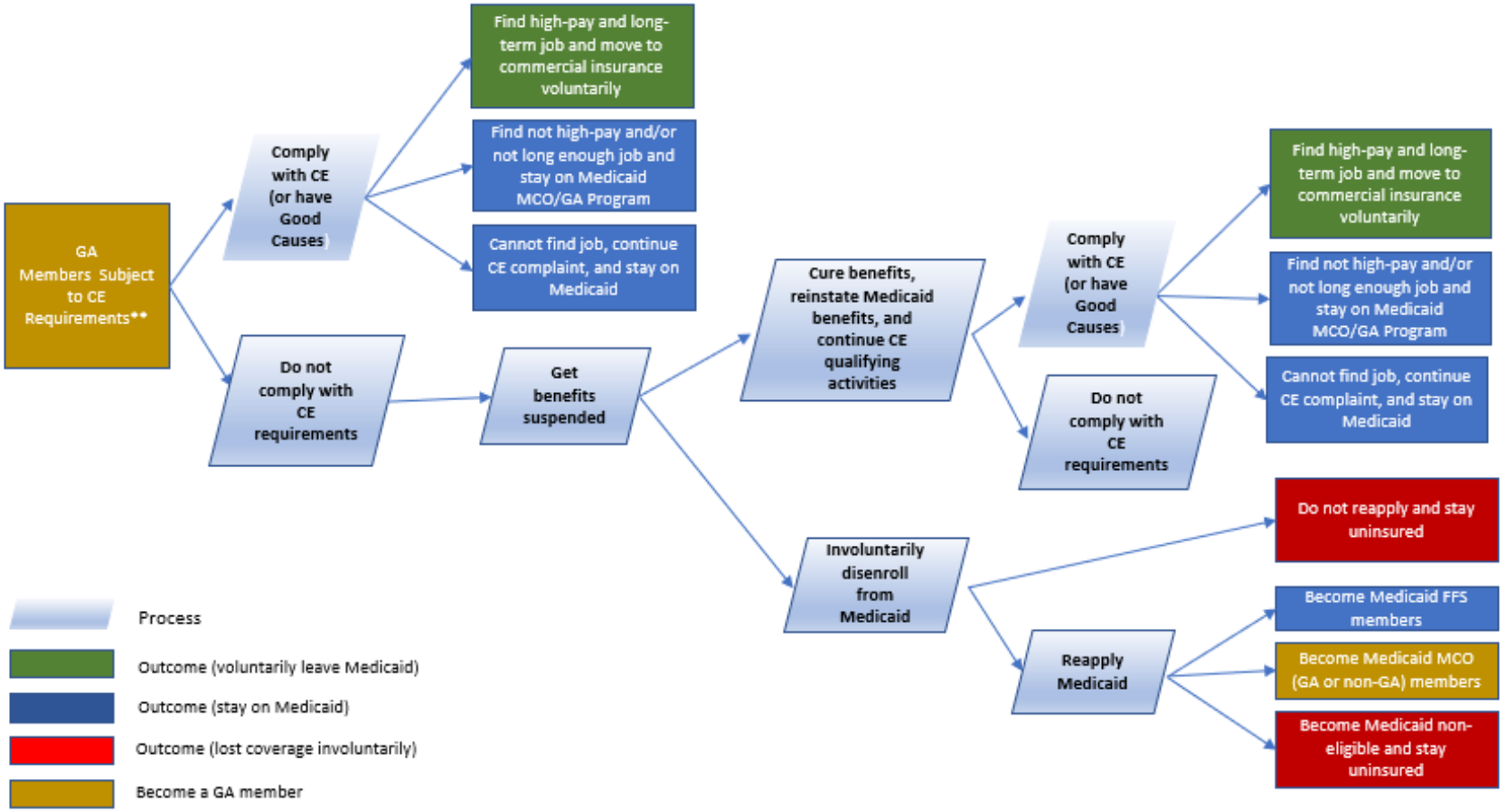
All activity and deliverable schedules are contingent on the status of NH's CE demonstration. Timeline will be updated accordingly.

* Although we only have one X, the reports will be submitted on a monthly basis.

** Activity will be conducted on an as-needed basis, but NH DHHS request can occur any time throughout the evaluation period.

*** According to the CMS Special Terms & Conditions, if NH is not renewing the demonstration, the interim report is due one year prior to the end of the demonstration. We will update this deliverable date based on NH's plan to end or renew the demonstration.

Attachment A.4. Pathways of Member CE Compliance and Coverage Status



Note: The diagram is developed by the Independent Evaluator for design purpose. It illustrates the pathways of CE member's compliance with policy requirements and resulting coverage status change. For those members not subject to CE requirements, they may also either stay on Medicaid, move to employer sponsored insurance/marketplace plans, or lose coverage. This flowchart does not consider appeals to change member coverage status. Also, each end point is temporary and specific at a point in time; individuals can regain Medicaid status or disenroll from Medicaid – **Individual coverage status can be a continuum and circular!**

Attachment A.5. Measure Tables

This attachment includes two sets of measures: one set is the outcome measures included in each design table (Tables 3, 6, and 7) for program effectiveness evaluation, and the other is measures used as control variables for selected outcomes, especially health outcomes. The list of these measures is in the tables below.

I. Outcome Measures for CE, RE, and Cost/Sustainability Evaluations

COMMUNUITY ENGAGEMENT EVALUATION	
Q1.1/Measure 1.1.1	**Probability of being employed**
Definition:	Probability of being employed among beneficiaries
Technical Specifications:	The numerator is the total number of Medicaid MCO members who are employed. The denominator is the total number of Medicaid MCO members.
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	1. Descriptive statistics 2. Difference-in-difference (DD) model
National Benchmark:	None
Data steward	N/A (measure to be calculated by UMMS)
Q1.1/Measure 1.1.2	**Probability of being employed at least 20 hours per week**
Definition:	Probability of beneficiaries who work at least 20 hours per week
Technical Specifications:	The numerator is the total number of Medicaid MCO members who work at least 20 hours per week. The denominator is the total number of Medicaid MCO members.
Exclusion Criteria:	For T members, beneficiaries not subject to CE requirements; for C members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	1. Descriptive statistics 2. DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1/Measure 1.1.3	**Number of hours worked per week**
Definition:	The average number of total hours worked per week
Technical Specifications:	The average number of total hours worked per week. This measure will be an average of total monthly hours worked divided by the number of weeks.
Exclusion Criteria:	Overall exclusion: only among members that are employed. For T members, beneficiaries not subject to CE requirements; for C members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	1. Descriptive statistics 2. DD model

National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1a/Measure 1.1a.1	**Proportion employed at 6 months (within 1 year, within 2 years, respectively)**
Definition:	The proportion of CE members who are employed at 6 months (or 1 year, or 2 years) after enrollment in GA
Technical Specifications:	The numerator is the total number of CE members who work at 6 months (within 1 year, within 2 years) The denominator is the total number of CE members who are not working at time of GA enrollment
Exclusion Criteria:	Medicaid members who are working at time of GA enrollment.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	N.A
Comparison Method(s):	1. Descriptive analysis of employment status at 6 months, 1 year, and 2 years post-enrollment
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1a/Measure 1.1a.2	**Proportion employed at least 20 hours per week for 6 months (1 year, 2 years)**
Definition:	The proportion of CE members who work at least 20 hours per week at 6 months (1 year, 2 years)
Technical Specifications:	The numerator is the total number of CE members who work at least 20 hours at 6 months, 1 year, and 2 years. The denominator is the total number of CE members who are not working at time of GA enrollment
Exclusion Criteria:	Medicaid members who are working at time of GA enrollment.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	N.A
Comparison Method(s):	1. Descriptive analysis of employment status at 6 months, 1 year, and 2 years post-enrollment
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1a/Measure 1.1a.3	**Proportion of beneficiaries meeting CE requirement by activity**
Definition:	Proportion of Medicaid beneficiaries meeting CE requirement by activities, including employment, education, volunteer work, and/or other equivalent activities (Note: this may be modified depending on CMS' technical specifications.)
Technical Specifications:	The numerator is the total number of CE eligible beneficiaries meeting CE requirement by various activities, monthly. The denominator is the total number of CE eligible beneficiaries who are meeting monthly requirements.
Exclusion Criteria:	GA members who are exempted from CE requirements.
Data Source(s):	CE monitoring metrics
Comparison Group(s):	none
Comparison Method(s):	Descriptive analysis of months and quarterly changes in qualifying CE activities, by activity
National Benchmark:	None
Data Steward	N/A (NH DHHS will report this.)
Q1.1a/Measure 1.1b.1	**Proportion employed for more than 1 year**
Definition:	The proportion of CE eligible members who are employed for 12 months continuously, *including* those who separate from Medicaid.
Technical Specifications:	The numerator is the total number of CE eligible members who work for 12 or more continuously since they become CE eligible The denominator is the total number of people who are employed at some point of months since they become CE eligible
Exclusion Criteria:	GA members who are exempted from CE requirements or CE eligible members who are not working since they become CE eligible

Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	none
Comparison Method(s):	descriptive analysis on members that last at least 12 months since they become CE eligible
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1b/Measure 1.1b.2	**Probability employed for 20 hours per week**
Definition:	The probability of CE eligible members who are employed and work at least 20 hours per week, *including* those who separate from Medicaid.
Technical Specifications:	The numerator is the total number of CE eligible members who work for 20 hours per week since they become CE eligible The denominator is the total number of people who are employed at some point of months since they become CE eligible.
Exclusion Criteria:	GA members who are exempted from CE requirements or CE eligible members who are not working since they become CE eligible
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	none
Comparison Method(s):	descriptive analysis
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1b/Measure 1.1b.3	**Probability of employment spell lasting 3 months (6 months, 1 year)**
Definition:	The proportion of CE eligible members who are employed continuously for 3 months (6 months, 1 year), *including* those who separate from Medicaid.
Technical Specifications:	The numerator is the total number of CE eligible members who work continuously for 3 months (6 months, 1 year) since they become CE eligible The denominator is the total number of CE eligible members who are employed at some point of months since they become CE eligible
Exclusion Criteria:	GA members who are exempted from CE requirements or CE eligible members who are not working since they become CE eligible
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Within treatment group comparison: 1. those who were already employed at enrollment (or at implementation of requirements). 2. those who gained employment in the first 3/6/12 months for enrollment 3. those who did not gain employment in the first 3/6/12 months of enrollment
Comparison Method(s):	Multivariate regression analysis with an indicator of group 1 & 2 vs. group 3 (reference group)
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.b/Measure 1.1b.4	**Average length of continuous employment period**
Definition:	The average number of months which CE eligible members are employed
Technical Specifications:	The numerator is the average number of months CE eligible members are employed since enrollment into GA/become CE eligible The denominator is the total number of CE eligible members who are employed at some point of months since they become CE eligible
Exclusion Criteria:	GA members who are exempted from CE requirements or CE eligible members who are not working since they become CE eligible
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Within treatment group comparison 1. those who were already employed at enrollment (or at implementation of requirements). 2. those who gained employment in the first 3/6/12 months for enrollment 3. those who did not gain employment in the first 3/6/12 months of enrollment
Comparison Method(s):	Multivariate regression analysis

National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1C/Measure 1.1c.1	**Average hourly wage**
Definition:	The average hourly wage among CE eligible members' newly gained jobs
Technical Specifications:	The average hourly wage among CE eligible members' newly gained jobs
Exclusion Criteria:	GA members who are exempted from CE requirements or CE eligible members who are not working since they become CE eligible
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Beneficiaries already employed at enrollment (or at implementation of CE requirement)
Comparison Method(s):	Descriptive analysis of characteristics of new jobs gained among beneficiaries subject to CE requirements
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1c/Measure 1.1c.2	**Average number of hours worked per week**
Definition:	The average number of hours per week for the newly gained jobs among CE eligible members who are employed
Technical Specifications:	The average number of hours per week for the newly gained jobs among CE eligible members who are employed
Exclusion Criteria:	GA members who are exempted from CE requirements or CE eligible members who are not working since they become CE eligible
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Beneficiaries already employed at enrollment (or at implementation of CE requirement)
Comparison Method(s):	Descriptive analysis of characteristics of new jobs gained among beneficiaries subject to CE requirements
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.1c/Measure 1.1c.4	**Proportion of employer-sponsored health insurance**
Definition:	The proportion of CE eligible members who receive newly gained jobs that offer employer-sponsored insurance (ESI)
Technical Specifications:	The numerator is the total number of CE eligible members who receive newly gained jobs that offer ESI The denominator is the total number of CE eligible members who receive newly gained jobs
Exclusion Criteria:	People who are not employed during the study period
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	The proportion of jobs among for beneficiaries already employed at enrollment (or at implementation of CE requirement) which offer ESI
Comparison Method(s):	Descriptive statistics
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q1.2/Measure 1.2.1	**Highest grade attained**
Definition:	The average level of highest grade attained 1 year (or 2 years) after program enrollment
Technical Specifications:	The numerator is the average level of highest grade attained 1 year (or 2 years) after program enrollment
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey

Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1/Measure 2.1	**Income (wage and other income)**
Definition:	Beneficiaries' total income (wage and others)
Technical Specifications:	Beneficiaries' total income, including wage and other income
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1a/Measure 2.1a.1	**Childcare costs**
Definition:	Childcare costs weekly
Technical Specifications:	Total childcare costs weekly
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	DD model
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1a/Measure 2.1a.2	**Transportation costs**
Definition:	Total transportation costs (weekly)
Technical Specifications:	Total transportation costs (such as gas or public transportation) weekly
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1a/Measure 2.1a.3	**Changes to income from loss of public program eligibility**
Definition:	Changes to income from loss of public program eligibility.
Technical Specifications:	Reduction in income from public assistance (i.e. SNAP, child care assistance, cash benefit) since member becomes CE eligible at 6/12/24 months
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; state follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None

Data Steward	N/A (measure to be calculated by UMMS)
Q2.1b/Measure 2.1b.1	**Proportion of beneficiaries who report higher or lower income since enrollment**
Definition:	The proportion of beneficiaries who report higher or lower income, of 5%, 10% and 20% or more in at least 50 (75) percent of months since enrollment
Technical Specifications:	The numerator is the total number of beneficiaries who report higher (or lower) income, of 5%, 10% and 20% or more in at least 50 (75) percent of months within 1 or 2 year(s) since enrollment The denominator is the total number of beneficiaries who are employed at least 1 or 2 year since enrollment.
Exclusion Criteria:	GA members who are not employed and employed more than a year continuously
Data Source(s):	New HEIGHTS data; state follow-up beneficiary survey
Comparison Group(s):	None
Comparison Method(s):	Descriptive analysis of sustained income changes, 1 and 2 years post enrollment
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1b/Measure 2.1b.2	**Probability of earning above 100 percent FPL**
Definition:	The proportion of CE eligible beneficiaries who earn above 100 percent FPL since enrollment
Technical Specifications:	The numerator is the total number of CE eligible beneficiaries who earn above 100 percent FPL since enrollment The denominator is the total number of CE eligible beneficiaries who are employed since enrollment.
Exclusion Criteria:	GA members who are not employed
Data Source(s):	New HEIGHTS data; state follow-up beneficiary survey
Comparison Group(s):	none
Comparison Method(s):	Regression-adjusted means
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1b/Measure 2.1b.3	**Probability of earning above 100 percent FPL in at least 50 (75, 100) percent of months since enrollment**
Definition:	The proportion of beneficiaries who earn above 100 percent FPL in at least 50 (75, or 100) percent of months since enrollment
Technical Specifications:	The numerator is the total number of beneficiaries who earn above 100 percent FPL in at least 50 (75, or 100) percent of months since enrollment The denominator is the total number of beneficiaries who are employed since enrollment.
Exclusion Criteria:	GA members who are not employed
Data Source(s):	New HEIGHTS data; state follow-up beneficiary survey
Comparison Group(s):	none
Comparison Method(s):	Regression-adjusted means
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1b/Measure 2.1b.4	**Average monthly income since enrollment**
Definition:	The average monthly income since enrollment
Technical Specifications:	The average monthly income since enrollment
Exclusion Criteria:	GA members who are not employed
Data Source(s):	New HEIGHTS data; state follow-up beneficiary survey
Comparison Group(s):	None
Comparison Method(s):	Regression-adjusted means
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1c/Measure 2.1c.1	**Probability of being disenrolled for being over-income within 6 months (1 year, 2 years) of enrollment**
Definition:	The probability of CE eligible beneficiaries who are disenrolled for being over-income within 6 months (1 year, 2 years) of enrollment

Technical Specifications:	The numerator is the total number of CE eligible beneficiaries who being disenrolled for being over-income within 6 months (1 year, 2 years) of enrollment The denominator is the total number of CE eligible beneficiaries who are employed since enrollment.
Exclusion Criteria:	CE eligible members who are not employed
Data Source(s):	New HEIGHTS; state baseline survey and follow-up surveys
Comparison Group(s):	None
Comparison Method(s):	Regression adjusted disenrollment rate
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1c/Measure 2.1c.2	**Probability of being disenrolled for being over-income since enrollment**
Definition:	The probability of CE eligible beneficiaries who are disenrolled for being over-income.
Technical Specifications:	The numerator is the total number of CE eligible beneficiaries who being disenrolled for being over-income. The denominator is the total number of CE eligible beneficiaries who are employed since enrollment
Exclusion Criteria:	CE eligible members who are not employed
Data Source(s):	New HEIGHTS; state baseline survey and follow-up surveys
Comparison Group(s):	None
Comparison Method(s):	Regression adjusted disenrollment rate
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1d/Measure 2.1d.1	**Probability of being enrolled in SNAP**
Definition:	The probability of beneficiaries who are enrolled in SNAP within 1 year of GA enrollment
Technical Specifications:	The numerator is the number of beneficiaries who are enrolled into SNAP within 1 year of GA enrollment. The denominator is the number of beneficiaries enrolled in SNAP who have an income increase in the measurement period.
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q2.1d/Measure 2.1d.2	**Probability of being enrolled in SNAP within 1 year (2 years) of enrollment**
Definition:	The probability of beneficiaries who are enrolled in SNAP within 1 year (and 2 years) of enrollment
Technical Specifications:	The numerator is the number of beneficiaries who are enrolled into SNAP within 1 year or 2 years of GA enrollment. The denominator is the number of beneficiaries enrolled in SNAP who have an income increase in the measurement period.
Exclusion Criteria:	Non treatment group members
Data Source(s):	New HEIGHTS; state follow-up beneficiary survey
Comparison Group(s):	None
Comparison Method(s):	Comparison of regression-adjusted quarterly enrollment in SNAP 1 and 2 years post-enrollment among: 1) Beneficiaries meeting CE requirement through employment 2) Beneficiaries meeting CE requirement through employment and who experience income gains 3) Beneficiaries meeting CE requirement through activity other than employment
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1/Measure 3.1.1	**Reported enrollment in commercial coverage within 1 year (2 years) of disenrollment from Medicaid**

Definition:	The number of enrollment in commercial coverage
Technical Specifications:	The total number of beneficiaries who are enrolled in ESI within 1 year (2 years) of disenrollment from Medicaid
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; follow-up beneficiary survey
Comparison Group(s):	Medicaid beneficiaries not subject to CE
Comparison Method(s):	Multivariate analysis of enrollment in ESI
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1a/Measure 3.1a.1	Reported offer of ESI
Definition:	Reported offer of ESI
Technical Specifications:	Reported offer of ESI (including whether the firm offers ESI and whether the individual is eligible for ESI) within 1 year (2 years) of disenrollment from Medicaid
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; follow-up beneficiary survey
Comparison Group(s):	Medicaid beneficiaries not subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1b/Measure 3.1b.1	Proportion of those with offer of ESI among those who enrolled in ESI
Definition:	The proportion of members who enroll in ESI with offer of ESI
Technical Specifications:	The numerator is the total number of beneficiaries who are offered of ESI and enroll in ESI The denominator is the total number of beneficiaries with offer of ESI and who are eligible
Exclusion Criteria:	Medicaid beneficiaries who are not employed
Data Source(s):	New HEIGHTS data; state baseline beneficiary survey; follow-up beneficiary survey
Comparison Group(s):	None
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1c/Measure 3.1c.1	Proportion who still have ESI coverage 1 year (2 years) after initial post-CE ESI take-up
Definition:	The proportion of CE eligible beneficiaries who still have ESI 1 year (2 years) after initial post-CE ESI take-up
Technical Specifications:	The numerator is the total number of CE eligible beneficiaries who are still enrolled in ESI 1 year (2 years) after initial post-CE ESI take up The denominator is the total number of beneficiaries enrolled in ESI after initial CE enrollment.
Exclusion Criteria:	Medicaid beneficiaries who have not transited off to ESI
Data Source(s):	State follow-up beneficiary survey; New HEIGHTS data; MMIS/Medicaid enrollment and eligibility
Comparison Group(s):	None
Comparison Method(s):	Descriptive analysis of ESI coverage at 1 and 2 years after initial ESI take-up
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1c/Measure 3.1c.2	Proportion with Medicaid coverage 1 year (2 years) after initial post-CE ESI take-up
Definition:	The proportion of CE eligible beneficiaries with Medicaid coverage 1 year (2 years) after initial post-CE ESI take-up
Technical Specifications:	The numerator is the total number of CE eligible beneficiaries with Medicaid coverage at year 1 (year 2) after initial post-CE ESI take up

	The denominator is the total number of beneficiaries enrolled in ESI after initial CE enrollment.
Exclusion Criteria:	Medicaid beneficiaries who have not transited off to ESI
Data Source(s):	State follow-up beneficiary survey; New HEIGHTS data; MMIS/Medicaid enrollment and eligibility
Comparison Group(s):	None
Comparison Method(s):	Descriptive analysis of ESI coverage at 1 and 2 years after initial ESI take-up
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1c/Measure 3.1c.3	Proportion uninsured 1 year (2 years) after initial post-CE ESI take-up
Definition:	The proportion of CE eligible beneficiaries uninsured 1 year (2 years) after initial post-CE ESI take-up
Technical Specifications:	The numerator is the total number of CE eligible beneficiaries uninsured year 1 (year 2) after initial post-CE ESI take up The denominator is the total number of beneficiaries enrolled in ESI after initial CE enrollment.
Exclusion Criteria:	Medicaid beneficiaries who have not transited off to ESI
Data Source(s):	State follow-up beneficiary survey; New HEIGHTS data; MMIS/Medicaid enrollment and eligibility
Comparison Group(s):	None
Comparison Method(s):	Descriptive analysis of ESI coverage at 1 and 2 years after initial ESI take-up
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1d/Measure 3.1d.1	Reported out-of-pocket medical spending in the last year
Definition:	Out-of-pocket medical spending in the last year
Technical Specifications:	Reported out-of-pocket medical spending in dollar amount in the last year
Exclusion Criteria:	Beneficiaries who never transition to ESI
Data Source(s):	State baseline beneficiary survey; State follow-up beneficiary survey; New HEIGHTS data
Comparison Group(s):	None
Comparison Method(s):	Descriptive analysis of reported beneficiary cost sharing for former demonstration beneficiaries who transitioned to ESI
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1d/Measure 3.1d.2	Reported problems paying insurance and medical bills
Definition:	Reported problems paying insurance and medical bills in the last year
Technical Specifications:	Reported problems paying insurance and medical bills in the last year
Exclusion Criteria:	Beneficiaries who never transition to ESI
Data Source(s):	State baseline beneficiary survey; State follow-up beneficiary survey; New HEIGHTS data
Comparison Group(s):	none
Comparison Method(s):	Descriptive analysis of reported beneficiary cost sharing for former demonstration beneficiaries who transitioned to ESI
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.1e/Measure 3.1e.1	Reported enrollment in QHPs, within 1 year (2 year) of disenrollment from Medicaid
Definition:	Reported enrollment in Marketplace plans, within 1 year (2 year) of disenrollment from Medicaid
Technical Specifications:	Reported enrollment in Marketplace plans, within 1 year (2 year) of disenrollment from Medicaid
Exclusion Criteria:	Beneficiaries without Medicaid disenrollment
Data Source(s):	NH CHIS (APCD if available); state follow-up beneficiary survey; New HEIGHTS data
Comparison Group(s):	None
Comparison Method(s):	Regression
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.2/Measure 3.2.1	Health insurance coverage within 1 year (2 year) of disenrollment
Definition:	Health insurance coverage for beneficiaries without Medicaid

Technical Specifications:	Any health insurance coverage (0/1) for beneficiaries who transition off Medicaid 0 means that the person does not have any health insurance (i.e., the person has transitioned off Medicaid and does not enroll in any commercial health insurance)
Exclusion Criteria:	Beneficiaries without Medicaid disenrollment
Data Source(s):	NH CHIS (APCD if available); state follow-up beneficiary survey; New HEIGHTS data
Comparison Group(s):	None
Comparison Method(s):	Regression
National Benchmark:	None
Data Steward	N/A (measure to be calculated by UMMS)
Q3.2a/Measure 3.2a	Reported barriers to enrollment in new coverage
Definition:	Reported barriers to enrollment in new coverage
Technical Specifications:	For those with coverage loss, barriers of enrollment in new coverage
Exclusion Criteria:	Beneficiaries without Medicaid disenrollment
Data Source(s):	state baseline survey and follow-up surveys
Comparison Group(s):	Member interviews; Member focus groups; Interview with program administrator/staff/SMEs
Comparison Method(s):	Descriptive qualitative analysis
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1/Measure 4.1.1	**Reported physical health status**
Definition:	Self-reported physical health status
Technical Specifications:	Self-reported physical health status
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	State baseline beneficiary survey; State follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1/Measure 4.1.2	**Reported mental health status**
Definition:	Self-reported mental health status
Technical Specifications:	Self-reported mental health status
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	State baseline beneficiary survey; State follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1/Measure 4.1.3	Reported Emergency Department (ED) visit in the last year
Definition:	Reported ED visit in the last year
Technical Specifications:	Self-reported ED visits in the last year
Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	State baseline beneficiary survey; State follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1/Measure 4.1.4	Reported hospital admissions in the last year
Definition:	Reported hospital admissions in the last year
Technical Specifications:	Self-reported hospital admissions in the last year

Exclusion Criteria:	For treatment group (T) members, beneficiaries not subject to CE requirements; for comparison group (C) members, beneficiaries matched with CE evaluation treatment group members.
Data Source(s):	State baseline beneficiary survey; State follow-up beneficiary survey
Comparison Group(s):	Non-disabled adult Medicaid beneficiaries who are not subject to CE requirements, further matched with GA beneficiaries subject to CE
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1a/Measure 4.1.a1	Change in reported physical health status
Definition:	Change in reported physical health status
Technical Specifications:	Change in reported physical health status among CE eligible beneficiaries
Exclusion Criteria:	Non treatment group members
Data Source(s):	State baseline beneficiary survey; State follow-up survey
Comparison Group(s):	None
Comparison Method(s):	Descriptive statistics
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1a/Measure 4.1.a2	Change in reported mental health status
Definition:	Change in reported mental health status
Technical Specifications:	Change in reported mental health status among CE eligible beneficiaries
Exclusion Criteria:	Non treatment group members
Data Source(s):	State baseline beneficiary survey; State follow-up survey
Comparison Group(s):	None
Comparison Method(s):	Descriptive statistics
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1a/Measure 4.1a.1	Change in ED visit
Definition:	Change in reported ED visit in past year
Technical Specifications:	Self-reported ED visits among CE eligible members within 2 years after initial CE enrollment
Exclusion Criteria:	Non treatment group members
Data Source(s):	State baseline beneficiary survey; State follow-up survey
Comparison Group(s):	None
Comparison Method(s):	Descriptive statistics
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1a/Measure 4.1a.2	Change in hospital admissions
Definition:	Change in reported hospital admissions
Technical Specifications:	Self-reported hospital admissions among CE eligible members within 2 years after initial CE enrollment
Exclusion Criteria:	Non treatment group members
Data Source(s):	State baseline beneficiary survey; State follow-up survey
Comparison Group(s):	None
Comparison Method(s):	Descriptive statistics
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q4.1b/Measure 4.1b.1	Association of disenrollment for noncompliance with CE requirements and physical health
Definition:	Self-reported physical health status among CE eligible members
Technical Specifications:	Self-reported physical health status among CE eligible members; CE compliance status
Exclusion Criteria:	Non treatment group members
Data Source(s):	New HEIGHTS data; state baseline beneficiary surveys; State follow-up beneficiary survey
Comparison Group(s):	Beneficiaries initially subject to CE requirement who remain enrolled
Comparison Method(s):	Regression model of self-reported health status among beneficiaries initially subject to requirement who were disenrolled for noncompliance
National Benchmark:	None

Data Steward	N/A (measure created by UMMS)
Q4.1b/Measure 4.1b.2	Association of disenrollment for noncompliance with CE requirements and mental health
Definition:	Self-reported mental health status among CE eligible members
Technical Specifications:	Self-reported mental health status among CE eligible members; CE compliance status
Exclusion Criteria:	Non treatment group members
Data Source(s):	New HEIGHTS data; state baseline beneficiary surveys; State follow-up beneficiary survey
Comparison Group(s):	Beneficiaries initially subject to CE requirement who remain enrolled
Comparison Method(s):	Regression model of self-reported health status among beneficiaries initially subject to requirement who were disenrolled for noncompliance
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q4.1b/Measure 4.1b.c	Association of disenrollment for noncompliance with CE requirements and ER visit
Definition:	Self-reported ER visits in past year among CE eligible members
Technical Specifications:	Self-reported ER visits in past year among CE eligible members
Exclusion Criteria:	Non treatment group members
Data Source(s):	New HEIGHTS data; state baseline beneficiary surveys; State follow-up beneficiary survey
Comparison Group(s):	Beneficiaries initially subject to CE requirement who remain enrolled
Comparison Method(s):	Regression model of self-reported ER visit among beneficiaries initially subject to requirement who were disenrolled for noncompliance
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q4.1b/Measure 4.1b.d	Association of disenrollment for noncompliance with CE requirements and hospital admissions
Definition:	Self-reported hospital admissions in past year among CE eligible members
Technical Specifications:	Self-reported hospital admissions in past year among CE eligible members
Exclusion Criteria:	Non treatment group members
Data Source(s):	New HEIGHTS data; state baseline beneficiary surveys; State follow-up beneficiary survey
Comparison Group(s):	Beneficiaries initially subject to CE requirement who remain enrolled
Comparison Method(s):	Regression model of self-reported hospital admissions among beneficiaries initially subject to requirement who were disenrolled for noncompliance
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
RETROACTIVE ELIGIBILITY ELIMINATION	
Q1.1/Measure 1.1.1	Number of individuals enrolled in Medicaid by eligibility group (monthly)
Definition:	Number of individuals enrolled in Medicaid by eligibility group (monthly)
Technical Specifications:	The total number of individuals enrolled in Medicaid based on eligibility group
Exclusion Criteria:	Non-treatment member
Data Source(s):	MMIS/Medicaid eligibility and enrollment data
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Descriptive statistics; interrupted time series (ITS)
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.1/Measure 1.1.2	Number of new enrollees in Medicaid by eligibility group (monthly)
Definition:	Number of new enrollees enrolled in Medicaid by eligibility group (monthly)
Technical Specifications:	The total number of new enrollees in Medicaid based on eligibility group, by month
Exclusion Criteria:	Non-treatment member
Data Source(s):	MMIS/Medicaid eligibility and enrollment data
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Descriptive statistics; ITS
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.1a/Measure 1.1a.1	Rate of a presumptive eligibility determination
Definition:	The probability of a presumptive eligibility determination

Technical Specifications:	The numerator is the total number of beneficiaries with presumptive eligibility determination. The denominator is total number of beneficiaries
Exclusion Criteria:	Non-treatment member
Data Source(s):	MMIS/Medicaid eligibility and enrollment data
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.1a/Measure 1.1a.2	Reported changes in providers' presumptive eligibility activities in response to retroactive eligibility waiver
Definition:	Changes in providers' presumptive eligibility activities in response to retroactive eligibility waiver
Technical Specifications:	Changes in reports in numbers of presumptive eligibility activities before and after retroactive eligibility waiver
Exclusion Criteria:	None
Data Source(s):	Abbreviated provider survey
Comparison Group(s):	none
Comparison Method(s):	Qualitative analysis of presumptive eligibility determinations
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.2/Measure 1.2.1	Probability of remaining enrolled in Medicaid for 12-, 18-, 24- consecutive months
Definition:	Probability of remaining enrolled in Medicaid for 12-, 18-, 24- consecutive months
Technical Specifications:	The numerator is the total number of Medicaid beneficiaries in Medicaid for 12-, 18-, and 24- consecutive months. The denominator is the total number of Medicaid beneficiaries
Exclusion Criteria:	Non-treatment member
Data Source(s):	MMIS/Medicaid eligibility and enrollment data
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Cochran-Armitage test; DD model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.2/Measure 1.2.2	Number of months with Medicaid coverage
Definition:	Number of months with Medicaid coverage each year
Technical Specifications:	The total number of consecutive months with Medicaid coverage among beneficiaries
Exclusion Criteria:	Non-treatment member
Data Source(s):	NH Medicaid enrollment data; PAP enrollment data
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.2a/Measure 1.2a.1	Reported knowledge of Medicaid policy on coverage during enrollment gaps
Definition:	Reported knowledge of Medicaid policy on coverage during enrollment gaps
Technical Specifications:	Reported knowledge of Medicaid policy on coverage during enrollment gaps.
Exclusion Criteria:	Non-treatment member
Data Source(s):	State beneficiary follow-up survey; member interview
Comparison Group(s):	None
Comparison Method(s):	Descriptive qualitative analysis of knowledge regarding Medicaid on coverage during enrollment gaps
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q1.2b/Measure 1.2b.1	Reported barriers to timely renewal
Definition:	Reported barriers to timely renewal
Technical Specifications:	Reported barriers to timely renewal.
Exclusion Criteria:	Non-treatment member
Data Source(s):	State beneficiary follow-up survey; member interview
Comparison Group(s):	None
Comparison Method(s):	Descriptive qualitative analysis of knowledge regarding Medicaid on coverage during enrollment gaps

National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q1.2c/Measure 1.2c.1	Probability of coverage gap
Definition:	Probability of coverage gap for 1, 2, or 3 months among those who are eligible
Technical Specifications:	The numerator is the number of months GA eligible beneficiaries with coverage gap The denominator is the number of GA eligible beneficiaries
Exclusion Criteria:	Non-treatment member
Data Source(s):	MMIS/eligibility, enrollment and encounter data
Comparison Group(s):	Beneficiaries with varying health status
Comparison Method(s):	Regression model by controlling for member health status
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.3/Measure 1.3.1	Probability with shorter enrollment gaps
Definition:	Probability of re-enrolling in Medicaid after a gap in coverage up to 6 months
Technical Specifications:	The numerator is the number of re-enrolling in Medicaid after a gap in coverage for up to 6 months The denominator is the number of beneficiaries disenrolled from Medicaid
Exclusion Criteria:	Non-treatment member
Data Source(s):	MMIS/eligibility and enrollment data
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q1.3/Measure 1.3.2	Number of months without Medicaid coverage
Definition:	Number of months without Medicaid coverage up to 6 months
Technical Specifications:	The total number of months without Medicaid coverage up to a 6 months' window
Exclusion Criteria:	Non-treatment member
Data Source(s):	MMIS/eligibility and enrollment data
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q2.1/Measure 2.1.1	Reported physical health status in the past year
Definition:	Reported physical health status in the past year
Technical Specifications:	Reported physical health status in the past year, among new enrollees
Exclusion Criteria:	Non-treatment member
Data Source(s):	State follow-up beneficiary survey
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Post-demonstration regression model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q2.1/Measure 2.1.2	Reported mental health status in the past year
Definition:	Reported mental health status in the past year
Technical Specifications:	Reported mental health status in the past year, among new enrollees
Exclusion Criteria:	Non-treatment member
Data Source(s):	State follow-up beneficiary survey
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Post-demonstration regression model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q2.1/Measure 2.1.3	Reported ER visits in the past year
Definition:	Reported ER visits in the past year
Technical Specifications:	Reported ER visits in the past year, among new enrollees
Exclusion Criteria:	Non-treatment member
Data Source(s):	State follow-up beneficiary survey
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Post-demonstration regression model
National Benchmark:	None

Data Steward	N/A (measure created by UMMS)
Q2.1/Measure 2.1.4	Reported hospital admissions in the past year
Definition:	Reported hospital admissions in the past year
Technical Specifications:	Reported hospital admissions in the past year, among new enrollees
Exclusion Criteria:	Non-treatment member
Data Source(s):	State follow-up beneficiary survey
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Post-demonstration regression model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q3.1/Measure 3.1.1	Reported physical health status
Definition:	Reported physical health status in the past year
Technical Specifications:	Reported physical health status in the past year, among all beneficiaries
Exclusion Criteria:	None
Data Source(s):	state follow-up survey for RE; CMS adult core set measures
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD; ITS
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q3.1/Measure 3.1.2	Reported mental health status in the past year
Definition:	Reported mental health status in the past year
Technical Specifications:	Reported mental health status in the past year, among all beneficiaries
Exclusion Criteria:	None
Data Source(s):	state follow-up survey for RE; CMS adult core set measures
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD; ITS
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q3.1/Measure 3.1.3	Reported ER visits in the past year
Definition:	Reported ER visits in the past year
Technical Specifications:	Reported ER visits in the past year, among all beneficiaries
Exclusion Criteria:	None
Data Source(s):	state follow-up survey for RE; CMS adult core set measures
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD; ITS
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q3.1/Measure 3.1.4	Reported hospital admissions in the past year
Definition:	Reported hospital admissions in the past year
Technical Specifications:	Reported hospital admissions in the past year, among all beneficiaries
Exclusion Criteria:	None
Data Source(s):	state follow-up survey for RE; CMS adult core set measures
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD; ITS
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q3.1/Measure 3.1.4	Reported outpatient visits in the past year
Definition:	Reported outpatient visits in the past year
Technical Specifications:	Reported outpatient visits in the past year, among all beneficiaries
Exclusion Criteria:	None
Data Source(s):	state follow-up survey for RE; CMS adult core set measures
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	DD; ITS
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q3.1/Measure 3.1.5	Reported medical debt (medical bills)
Definition:	Self-reported medical debt (medical bills)
Technical Specifications:	Self-report medical debt (medical bills)
Exclusion Criteria:	None

Data Source(s):	state follow-up survey for RE
Comparison Group(s):	NH's non-GA Medicaid beneficiaries matched with GA members
Comparison Method(s):	Regression model
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
COST	
Q1/Measure 1.1	Administrative cost of demonstration implementation
Definition:	Administrative cost of demonstration implementation
Technical Specifications:	Administrative cost of demonstration implementation, including: 1) cost of contracts or contract amendments, and 2) staff time equivalents required to establish demonstration policies, typically incurred the initial year of the demonstration
Exclusion Criteria:	None
Data Source(s):	State and managed care administrative records; Semi-structured Interviews with state program administrator/staff and state agency partners
Comparison Group(s):	none
Comparison Method(s):	Descriptive analysis of administrative costs
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q1/Measure 1.2	Administrative cost of ongoing demonstration operation
Definition:	Administrative cost of ongoing demonstration operation
Technical Specifications:	Administrative cost of **ongoing** demonstration **operation** (FY2019-2024), including 1) cost of contracts or contract amendments, and 2) staff time equivalents required to administer demonstration policies
Exclusion Criteria:	None
Data Source(s):	State and managed care administrative records; Semi-structured Interviews with state program administrator/staff and state agency partners
Comparison Group(s):	none
Comparison Method(s):	Descriptive analysis of administrative costs
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q1/Measure 1.3	Administrative cost of state agencies partnering with Medicaid
Definition:	Administrative cost of state agencies partnering with Medicaid on
Technical Specifications:	Administrative costs to state agencies partnering with Medicaid to implement and operate the demonstration
Exclusion Criteria:	None
Data Source(s):	Interviews with state agency staff and partner organizations
Comparison Group(s):	none
Comparison Method(s):	Descriptive analysis of administrative costs
National Benchmark:	None
Data Steward	N/A (information collected by UMMS)
Q2/Measure 2.1	Total health services expenditure
Definition:	Total health service expenditures
Technical Specifications:	Total health service expenditures
Exclusion Criteria:	None
Data Source(s):	MMIS eligibility, enrollment, and claims/ encounter
Comparison Group(s):	none
Comparison Method(s):	Descriptive analysis; ITS model; subgroup analyses
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)
Q2/Measure 2.2	Per member per month (PMPM) expenditure
Definition:	PMPM expenditure
Technical Specifications:	PMPM expenditure
Exclusion Criteria:	None
Data Source(s):	MMIS enrollment, eligibility, claims/ encounters
Comparison Group(s):	NH's non-GA beneficiaries matched with GA members
Comparison Method(s):	DD model; ITS model
National Benchmark:	None

Data Steward	NH DPH
Q3/Measure 3.1	Reported uncompensated care by hospitals and other providers, including FQHCs
Definition:	Reported uncompensated care by hospitals and other providers, including FQHCs
Technical Specifications:	Reported uncompensated care by hospitals and other providers, including FQHCs
Exclusion Criteria:	None
Data Source(s):	HCRIS S-10 data; (or state provider survey)
Comparison Group(s):	None
Comparison Method(s):	Descriptive quantitative analysis; ITS if HCRIS data are available for the evaluation
National Benchmark:	None
Data Steward	N/A (measure created by UMMS)

II. CMS Adult Core Set Measures Selected to Serve as Control Variables for Health/Cost Outcomes

Measure C1	**HEDIS: Antidepressant Medication Management**
Definition:	Members 18+ treated with antidepressant medication, had a diagnosis of major depression and who remained on antidepressant medication treatment for at least 84 days and for at least 180 days
Technical Specifications:	1. Percent of members 18+ treated with antidepressant medication, had a diagnosis of major depression and who remained on antidepressant medication treatment for at least 84 days, in the calendar year. 2. Percent of members 18+ treated with antidepressant medication, had a diagnosis of major depression and who remained on antidepressant medication treatment for at least 180 days, in the calendar year.
Exclusion Criteria:	Members < 18; members who (a) are not treated with antidepressant medication and/or (b) don't have a diagnosis of major depression.
Data Source(s):	MMIS/Medicaid claims and encounters
Comparison Group(s):	CE/RE treatment and comparison group
Comparison Method(s):	Regression, for survey year
National Benchmark:	1. 2014 Medicaid HMO = 52.3%; 2. 2014 Medicaid HMO = 37.1%
Data Steward	National Committee for Quality Assurance (NCQA)
Measure C2	**Access to Care**
Definition:	Getting needed care and getting care quickly
Technical Specifications:	Composite measure including items related to getting needed care and getting care quickly
Exclusion Criteria:	None
Data Source(s):	Medicaid CAHPS/QHP patient experience of care
Comparison Group(s):	CE/RE treatment and comparison group
Comparison Method(s):	Regression, annually
National Benchmark:	None
Data Steward	NCQA
Evaluation contractor may obtain these data from NH DHHS or follow additional specifications available at https://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf, (p. 77). Whichever method is selected should be used consistently across years. Please note that this metric should be measured using the CAHPS data available from the NH DHHS.	
Measure C3	**Care Coordination Composite Score**
Definition:	The care coordination composite score is based on five questions regarding the care provided by the member's personal doctor and the doctor's staff in the last 6 months. Three items relate specifically to the care provided by the personal doctor: how often the personal doctor (a) had the member's medical records or other information about their care, (b) seemed informed and up-to-date about care from specialists, and (c) talked with the member about prescription medication. Two additional questions query the actions of the staff from the personal doctor's office: how often someone from the doctor's office (a) spoke with the member regarding test results and (b) assisted the member in managing care from different providers and services.

Technical Specifications:	The numerator will include the number of beneficiaries who responded "always" to each of the five questions regarding care coordination. The denominator will include all beneficiaries who responded to all of the questions.
Exclusion Criteria:	Beneficiaries <18 years old; beneficiaries who do not have a behavioral health disorder
Data Source(s):	Medicaid CAHPS/QHP patient experience of care
Comparison Group(s):	CE/RE treatment and comparison group
Comparison Method(s):	Regression, annually
National Benchmark:	None
Data steward	NCQA
Measure C4	**Behavioral Health Composite Score**
Definition:	Three questions will be used to measure behavioral health care received in the last 12 months provided by anyone in the personal provider's office: whether or not members were (a) asked if there was a period of time when they felt sad, empty, or depressed, (b) talked to about whether there were things in the member's life causing them worry or stress, and (c) talked to about a personal or family problem, alcohol or drug use, or an emotional or mental illness.
Technical Specifications:	The numerator will include the number of beneficiaries with a behavioral health disorder who responded affirmatively to the questions described above. The denominator will include all beneficiaries with a behavioral health disorder who responded to all three of the questions.
Exclusion Criteria:	Beneficiaries <18 years old; beneficiaries who do not have a behavioral health disorder
Data Source(s):	Medicaid CAHPS/QHP Experience of Care Survey
Comparison Group(s):	CE/RE treatment and comparison groups
Comparison Method(s):	Regression, annually
National Benchmark:	None
Data steward	NCQA

III. CMS Adult Core Set Measures Selected to Serve as Outcome Variables (OV)

Measure OV1	**Emergency Department (ED) Visits**
Definition:	Frequent (4+ annually) ED visits
Technical Specifications:	The percentage of Medicaid beneficiaries who had 4+ visit(s) to an ED in the last 12 months The numerator is the number of Medicaid beneficiaries who had 4+ visit(s) to an ED in the last 12 months. The denominator is the number of Medicaid beneficiaries.
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS
Measure OV2	**Inpatient Hospital (IP) Visits**
Definition:	Frequent (4+ annually) inpatient hospital visits
Technical Specifications:	The percentage of Medicaid beneficiaries who had 4+ visit(s) to an IP in the last 12 months The numerator is the number of Medicaid beneficiaries who had 4+ visit(s) to an IP in the last 12 months. The denominator is the total number of beneficiaries.
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS

Measure OV3	**Outpatient (OP) Visits**
Definition:	Frequent (4+ annually) outpatient visits
Technical Specifications:	The percentage of Medicaid beneficiaries who had 4+ visit(s) to OP providers in the last 12 months The numerator is the number of Medicaid beneficiaries who had 4+ visit(s) to an OP in the last 12 months. The denominator is the total number of beneficiaries.
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS
Measure OV4	**Total PMPM Cost of Care**
Definition:	Total per member per month (PMPM) cost for Medicaid beneficiaries The numerator is the annual total costs. The denominator is the number of member months.
Technical Specifications:	Annual total costs divided by the number of member months
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS
Measure OV5	**Total PMPM Cost of All Inpatient Care**
Definition:	Total PMPM inpatient costs for Medicaid beneficiaries
Technical Specifications:	The numerator is annual total inpatient costs. The denominator is the number of member months among beneficiaries.
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS
Measure OV6	**Total PMPM Cost of All Outpatient Care**
Definition:	Total PMPM outpatient costs for Medicaid beneficiaries
Technical Specifications:	The numerator is annual total outpatient costs. The denominator is the number of member months among beneficiaries.
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS
Measure OV7	**Total PMPM Cost of Emergency Department (ED) Care**
Definition:	Total PMPM ED costs for Medicaid beneficiaries
Technical Specifications:	The numerator is quarterly/annual total ED costs. The denominator is the number of member months.
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS

Measure OV8	Hospital Re-Admission for Any Cause
Definition:	Readmission to hospital for any cause (excluding maternity, cancer, rehabilitation) within 30 days for adults (18+)
Technical Specifications:	Count of the number of hospital readmissions within 30 days of discharge, among adult (≥=18 years old) members
Exclusion Criteria:	None
Data Source(s):	Medicaid claims and encounters
Comparison Group(s):	RE/Sustainability evaluation treatment and comparison groups
Comparison Method(s):	Regression
National Benchmark:	None
Data steward	NH DHHS
Evaluation contractor may obtain these data from NH DHHS or follow additional specifications available at https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf, (p. 133). Whichever method is selected should be used consistently across years.	

Attachment A.6: State Baseline Beneficiary Survey Questionnaire

Survey Introduction: The New Hampshire Department of Health and Human Services is conducting a survey to learn more about your experience as a member enrolled in either NH Healthy Families (NHHF) or Well Sense health care plan. We want to evaluate if the new community engagement and work requirement will improve the health and financial well-being of our members over time. While your answers will be used in evaluation activities, they will have no impact on your Medicaid eligibility or benefits.

If you want to know more about this study, please call 1-888-506-5133.

SURVEY INSTRUCTIONS

- **Please be sure to fill the response circle completely. Use only black or blue ink or dark pencil to complete the survey.**

Correct Mark ●

Incorrect Marks ⊘ ✓ ●

- **You are sometimes told to skip over some questions in the survey. When this happens, you will see an arrow with a note that tells you what question to answer next, like this:**

● **Yes** ➔ ***Go to Question 1***
○ **No**

START HERE

1. **In the past 12 months, did you have a job?**

○ Yes
○ No ➔ ***Go to Question 4***

2. **In the past 12 months, did you have a job that offered health insurance?**

○ Yes
○ No ➔ ***Go to Question 4***

3. In the past 12 months, did you enroll in the health insurance offered to you by your job?

- ○ No, I was not eligible.
- ○ No, I was eligible but could not afford the insurance.
- ○ Yes, I have been enrolled in the insurance for the entire 12 months.
- ○ Yes, I have been enrolled in the insurance for less than 12 months.

4. In the past 12 months, have you had to pay out-of-pocket for any medical expenses? Examples might include payments for doctor visits or medications.

- ○ Yes
- ○ No ➔ ***Go to Question 6***

5. In the past 12 months, have you had problems paying medical bills?

- ○ Yes
- ○ No
- ○ Don't know or not sure

6. In the past 12 months, how many times have you gone to the emergency room for a medical condition?

- ○ None
- ○ 1 time
- ○ 2 to 3 times
- ○ 4 or more times

7. In the past 12 months, <u>not</u> counting the times you went to an emergency room, how many times have you been admitted to a hospital for a medical condition?

- ○ None
- ○ 1 time
- ○ 2 or more times

8. In the past 12 months, in general, how would you rate your overall physical health?

- ○ Excellent
- ○ Very good
- ○ Good
- ○ Fair
- ○ Poor

9. In the past 12 months, in general, how would you rate your overall mental or emotional health?

- ○ Excellent
- ○ Very good
- ○ Good
- ○ Fair
- ○ Poor

10. In the past 12 months, have you spent money on child care?

- ○ Yes
- ○ No ➔ ***Go to Question 12***

11. On average, how much do you spend for child care each week?

- ○ Less than $100
- ○ $100-$199
- ○ $200-$299
- ○ $300 or more

12. On average, how much do you spend on transportation, such as gas or public transportation, each week?

- ○ Less than $10
- ○ $10-$29
- ○ $30-$49
- ○ $50 or more
- ○ I do not have transportation costs

13. Public assistance programs help individuals pay for monthly household expenses. Examples of these type of public assistance programs include Medicaid, Temporary Assistance for Needy Families (TANF), Child Care Assistance, and Supplemental Nutrition Assistance Program (SNAP).

In the past 12 months, have you lost eligibility for any public assistance program?

- ○ Yes
- ○ No ➔ ***Go to Question 15***

14. In the past 12 months, has your household income changed because of a loss of eligibility for any public assistance program?

- ○ Yes
- ○ No

15. The New Hampshire Department of Health and Human Services would like to contact you again in the future to see if your answers have changed. May we contact you?

- ○ Yes ➔ ***Go to Question 16***
- ○ No ➔ ***Thank you. Please return the completed survey in the postage-paid envelope.***

16.Please provide an email address and phone number where we may contact you:

Email address:_____

Phone number:_____

Thank you for taking the time to complete this survey!